

Janja Črčinovič Rozman, Bojan Kovačič

Pedagogical Faculty, University of Maribor  
Pedagoška fakulteta, Univerza v Mariboru

# Harmoniousness in Connecting Music and Visual Artworks in the Slovenie and Finnish Cultural Environment

## Ujemanje povezovanja glasbe in likovnih del v slovenskem in finskem kulturnem okolju

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### IZVLEČEK

Glasbena in likovna dela lahko vsebujejo enake elemente in principe oblikovanja. Od njih je odvisna osebna apreciacija umetniških del. Izsledki empirične raziskave o tem, kako slovenski in finski študenti razrednega pouka doživljajo obe umetniški področji in se nanju odzivajo, kažejo na nekatere razlike v povezovanju štirih glasbenih in likovnih umetniških del glede na kulturno okolje študentov.

### ABSTRACT

Music and visual artworks can contain same elements and principles of design. These elements influence the personal appreciation of artworks. The results of empirical investigation into the experiences and reactions of Slovene and Finnish students of elementary education in both fields of art show some differences in connecting four musical and visual artworks in accordance with the cultural environment of the students.

## Introduction

Art includes a variety of areas, however, in all we can talk about their design and content side and we can observe and judge art from the formalistic and content aspects. Even Kant, in his discussion on the aesthetic, covered both cognitive and emotional

pleasure.<sup>1</sup> Even Hegel, in his discussions about art contents, mentioned the concept of expressiveness or the relation between the interior and exterior.<sup>2</sup> In artworks one can respond cognitive or non-cognitive. How do we judge a work of art, depends on the criteria for evaluating art. The concept of aesthetic evaluation is centered on the sensory characteristics of the object and how they are structured, when they form a detectable form of the object. Savile says that "beauty" is a general term for aesthetic evaluation. A work of art should be beautiful only if it solves a problem in its style and evokes the appropriate response. This response is the feeling of satisfaction that we have, when we realize, that the solution to the problem, which a work of art within the stylistic limitations offers, is simply correct.<sup>3</sup>

Music and visual arts are nonverbal forms of communication. The first is based on the auditory medium, the other on the visual. For music temporal dimension is important, for visual arts space. Despite these differences we can find between the two forms of art many connections in their multi-dimensional nature. Many famous composers, such as Mendellsohn, Weber, Schönberg, Gershwin were also respected painters; famous painters, such as Kandinsky, Delacroix, Matisse, Klee, were famous instrumentalists.<sup>4</sup>

When discussing the music or the visual arts, a part of our vocabulary are the words like style, balance, movement and form. In both types of art we find the same elements as rhythm, pattern, color, line and texture. The agreement between the two arts provide an opportunity for their integration, and even more deepen own creative expression.

The relationship between pitch and color tone already in the history interested artists and natural scientists. We know that color and sound produce vibrations that affect subjective transfers of one medium to the perception of another. This phenomenon is known under the concept of synaesthesia. In the middle of 17<sup>th</sup> Century Athanasius Kircher formed a kind of implicit theory about colors as well as light.<sup>5</sup> In the 18<sup>th</sup> Century the mathematician and Jesuit Louis-Bertrand Castel recognized a link between the primary colors (red, yellow, blue) and pitches of the ideal major chords. Even Isaac Newton, Goethe and Beethoven were not immune to colors. The latter, for example, associated b-minor tonality with black. The first abstract painter, who liberalized the color, line and shape of objects, was Wassily Kandinsky. He was convinced that he can hear colors, associated by specific instruments. He received associations for many of his works in music experience. This also applies to paintings with titles, Improvisation and Composition.

The process of reverse activity is performed also in the composers. Mussorgsky was inspired by images of Viktor Hartmann (*Pictures at an Exhibition*). Debussy was inspired, among other works, by works of Velasquez and Botticelli. The attraction between music and paintings was not limited to direct visual and auditory stimuli. Important role in the arts have had a concept of time such as the rhythm and movement.

<sup>1</sup> Božidar Kante, *Estetika narave*, Paideia, 3 (Ljubljana: Založba Sophia, 2009), p. 186.

<sup>2</sup> Hegel, Georg Wilhelm Friedrich. Translated by Robert Vouk. *Predavanja o estetiki: dramska poezija*. Ljubljana: Društvo za teoretsko psihoanalizo, 2001.

<sup>3</sup> Kante, 44.

<sup>4</sup> Robert Markow. "Music and Art," <<http://artsalive.ca/collections/nacmusicbox/en/index.php?pageid=essays/essaymusicand..>> August 20, 2009.

<sup>5</sup> Helga de la Motte-Haber, Vera Gregorač, trans., *Psihologija glasbe* (Ljubljana: DZS, 1990), p. 269.

Paul Klee has found inspiration for his artworks in folk music, jazz, pop and classical music. He wanted to present among colors and the line, also time, movement and rhythm.<sup>6</sup>

Along parallels of music and art, there is another important parallel - these are the emotions. Music releases emotions through the hearing, at the art field the emotions are those that provide the opportunity for artistic expression. In combining these two areas or experiencing the music and works of art at the same time one can with one media influence on the perception of increased intensity of other artistic media.

Art is not meant only to itself. It is a part of social life and is intended to balancing the spiritual tendencies and to coordination between individuals with society and nature.<sup>7</sup> The power of artistic works in humans evokes the deepest emotions of the aesthetic dimension. This dimension refers to the process of perception, feeling, organization and thinking about organizing artistic experiences. This dimension results in expressions, which have the some relevance to its recipient. Aesthetic satisfaction is achieved when we react emotionally to the artistic elements and try to understand the artistic forms.

## Arts appreciation

The discussion of arts appreciation relates to the nature of our “attention” or “interest” in the arts experience. “Inconsidering arts appreciation we need to interrogate experience and interaction: frames that we left unexamined, may unconsciousness shape our attention, our interest, our judgments”.<sup>8</sup>

Appreciation has been categorized in the fields of *philosophy*, *psychology*, and *sociology*. In other approaches, the appreciation has been investigated through analysis of its cognitive, affective and/or somatic affects.

In the field of *philosophy*, appreciation has been concerned variously with defining “beauty”, identifying the distinctive features of experience, and making judgments of quality about specific works, their performance, and their creators.<sup>9</sup> In this approach have attempted to identify the focus of our attention and judge the quality of art works.

In the *psychological* views appreciation was examined as perception and cognition in relation to meaning. On the musical field the attention of researchers was focused on identifying measuring individuals’ musical attention, and preferences. Barrett cites the following developmental trends of verbal interpretative response to music listening experience:

- Young children are more concerned with describing isolated proprieties of sound with the affective aspects of music;

<sup>6</sup> Markow, 1-2.

<sup>7</sup> Milan Butina, *Mala likovna teorija* (Ljubljana: Debora, Visoka strokovna šola slikarstva, 2000), p. 2.

<sup>8</sup> Margaret S. Barrett, *Appreciation, Locating the Hart of Experience*, in Liora Bresler, ed., *International Handbook of Research in Arts Education*, Part 1, Vol. 16 (Dordrecht, The Netherlands: Springer, 2007), p. 568.

<sup>9</sup> Hanslick, Eduard. *O muzički lijepom*. Beograd: Beogradski izdavačko-grafički zavod, 1977.

- Musically untrained children's and adults' verbal response are primarily concerned with "extra-musical" references with some references to timbre, tempo, and dynamics; and
- Children move progressively through stages dominated respectively by:
  1. a focus on the materials of music (isolated properties),
  2. a focus on expressive properties, and
  3. a focus of issues of form and structure.

*Sociological* approaches examine relations between social, cultural, and psychological factors in appreciation. Studies are oriented to taste, preferences, and practical engagement and use.<sup>10</sup>

Art appreciation simply means being able to look at works and form your own opinions. It is recognition of those timeless qualities that characterize all great art. This process works in conjunction with the students' inherent creative and expressive abilities. Artwork can be perceived and analyzed through the senses, but we have to see the entirety of an individual artwork. For visual and musical artwork, the students' attention must be directed towards concrete elements in the structure of the artworks, as well as to perceiving the expressive qualities. These elements impact the whole work and affect the personal reactions and connections to this art form. Students recognize some elements earlier, and some later, never all of them at the same time. So, at the beginning, they have to identify each element extra and after long lasting exercise, they are able to focus their attention to representational, expressive, and formal accounts. They respond to different artistic elements and their organization in different ways.<sup>11</sup>

Practical experiences of the individual to a specific artistic field and the influence of the environment provide strong individual criteria for the assessment of art objects. Reactions to the new and unknown depend on expectations and are usually negative at first, when the art object is significantly different from our expectations.<sup>12</sup> With active contacts and repeated listening to music or observing works of art in the field of visual arts we achieve a sense of closeness, therefore we find works, we have initially refused, close to us and we start to objectively evaluate and assess their quality.

In present study we examined psychological and sociological (cultural) factors of art appreciation. We have paid special attention to the active reception and creative reactions to works of art that were selected from the presumption that the appreciative abilities are being made up of a broader scope of abilities and characteristics, which include: subtle perception, imagination, associations, memory, emotions, and evaluations in general. It is present in the population of students as well as all other abilities and it develops with education.

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<sup>10</sup> Barrett, in Bresler, p. 605–620.

<sup>11</sup> Janja Črčinovič Rozman, Matjaž Duh, "Apreciacija kot skladnost doživljanja likovnih umetnin," *Sodobna pedagogika* 3 (2007): 92–109.

<sup>12</sup> Janja Črčinovič Rozman, "Vpiv pouka na kvaliteto poslušanja glasbe," *Glasba v šoli* 2 (1996): 3–4.

## **Planning and Realization of the Research**

### *Background*

The research was based on the fact that people experience the connections between different kinds of art and searching their contacts. Interactions between the arts recipients and the artworks vary from person to person, from the focus of their attention, as well as reactions to the art works and its valuation.

Human thought and actions are different. Environment and the learning process have an influence on them. Individuals have an influence on the groups, and “visa versa”, groups influence on the individuals. Interaction and influence are reciprocal.

Every ethnic culture is special and unique. Understanding the unique features of arts requires learning of elements, ideas and beliefs realities to arts. Normative expectations between the arts preferences and the fans of the arts styles in different cultural environments differ. Because environment, economy, and values influence our folk cultural heritage, therefore two distant cultural environments that vary widely in these entities have been selected for our study. These cultures were: Slovenian and Finnish. The Slovenian cultural environment is characterized by contacts to the Slovenian folk music legacy, which is tonal. The majorities of songs are in major tonalities and rhythmically easily shaped. Even in popular music catchy, major melodic is heavily emphasized. The Finnish cultural environment is characterized by the presence of harsh sonority of music. Recipients are well known Sami yoiks “a style of music quite distinct from Western tonal music”,<sup>13</sup> but also metal and jazz. The way of visual artistic expression is also significantly different.

Because the evaluation of and responses to artworks are strongly influenced by previous experience and expectations, we tried to examine the impact of cultural identity on the integration of selected music and artworks by testing Slovenian and Finnish students of elementary education, who in their study program include music and visual arts contents, and have the same number of years of study.

### *Purpose and aims*

The purpose of the present cross-cultural study was to perform empirical research for finding out the harmoniousness in connecting the music and visual fine art fields in two different European cultural environments. The emphasis was on the active reception of chosen music excerpts and visual art works and the creative reactions to them. We wanted to know if there exists a difference in connecting selected music and visual artworks according the Slovenian and Finnish cultural environment.

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<sup>13</sup> Carol L. Krumhansla et al., “Cross-cultural music cognition: cognitive methodology applied to North Sami yoiks,” *Cognition* 76 (2000): 13–58.

## *Sample*

211 students of Elementary education from University of Maribor and University of Lapland were included in the research. 105 (49.8 %) were Slovenian students and 106 (50.2 %) were Finnish students. The students were selected in the two groups according to their national environment.

## **Design and methods**

For the research into the simultaneous experience of art and music, we used the descriptive and causal methods of pedagogical research. The research work with the students was performed during their free time, in Lapland in the years 2008 (April) and 2009 (January), in Slovenia in the year 2008 (October). First we talked with the students about the procedure of testing. After then we concentrated on listening to the music excerpts, each approximately a minute and a half long, with closed eyes in an attempt to absorb the sound more thoroughly. We then examined the selected artworks in detail for half a minute. After this was done we began the experiment of experiencing the art and music simultaneously. All the paintings were signed with alphabets (A; B; C; D) and music excerpts were numbered by numbers (1, 2, 3, 4). Each student received a sheet of paper with numbers of music excerpts and alphabets for the selected paintings. Then they listened to each piece in the order we prepared them and at the same time all four good reproductions selected artworks were presented by the help of power point. They were then asked to connect the music that was heard to one of the selected paintings and write down the alphabet of corresponded painting they chose on the line beside the number of music. They listened to the same length of every composition as on the beginning. The students did not have any problems with completing their tasks. They all carefully listened to the music and observed the paintings. The Chi-Square test was used to check relations between the answers given by students of different national environments.

## **Designing the research content**

### *Selection of the Artworks*

In selecting the art samples we considered facts that dealt with the students of Elementary education included in the sample for research, which had in their study program music and visual art subjects. We chose works created using different art languages, contrasting elements, principles, structures, forms, and expressions, which allows different interpretations according to recipients' point of view. We won't that artistic subjects would have an impact on the results of our study, therefore we decided for absolute music and abstract paintings.

The chosen music was instrumental. Two compositions were composed in the tra-

ditional (tonal) musical language, and two of them in a modern (contemporary) style – one of them were of Slovenian composer and one of Finnish.

We chose two visual art works with dominated soft and two with hard shapes. In three works there were geometric and in one amorphous contours.

The selected musical works were as follows:

*Gustav Mahler: Symphony No. 1 in D-Major, second movement*

*Tomaso Giovanni Albinoni/Giazotto: Adagio*

*Jean Sibelius: Symphony No. 1 in D-Major, third movement*

*Slavko Osterc: Nonet*

The selected visual art works were as follows:

*Wassily Kandinsky: Red Spot*

*Piet Mondrian: Tableau II*

*Robert Delaunay: Circular Forms*

*Wassily Kandinsky: Triangles in Arc.*

As in music, where individual compositions can be connected to specific emotions and nonmusical thoughts, the selected abstract paintings can also awaken different feelings. This is where the two art forms connect beside the use of similar or same elements, principles, structures and forms. On the basis of one's appreciation of music, it is possible to associate the paintings chosen for this research. This fact summarizes the backbone of our research into the simultaneous experience of music and art.<sup>14</sup>

### *Interpretation of the results*

*Linking the paintings to the first musical sample (Mahler: Symphony No. 1 in D-Major, second movement)*

*Table 1: Distribution of connections between the first musical sample and the paintings according to the differences between cultural environments – Slovenian and Finnish students*

Alphabets and Names of Painting	1 <sup>st</sup> piece of music: Mahler				Together	
	SI		FI		n	%
	n	%	n	%		
<b>A Red Spot (Kandinsky)</b>	<b>19</b>	<b>18,1</b>	<b>8</b>	<b>7,5</b>	<b>27</b>	<b>12,8</b>
<b>B Tableau II (Mondrian)</b>	<b>11</b>	<b>10,5</b>	<b>29</b>	<b>27,4</b>	<b>40</b>	<b>19,0</b>
<b>C Circular Forms (Delaunay)</b>	<b>40</b>	<b>38,1</b>	<b>38</b>	<b>35,8</b>	<b>78</b>	<b>37,0</b>
<b>D Triangles in Arc (Kandinsky)</b>	<b>35</b>	<b>33,3</b>	<b>31</b>	<b>29,2</b>	<b>66</b>	<b>31,3</b>
<b>Together</b>	<b>105</b>	<b>100,0</b>	<b>106</b>	<b>100,0</b>	<b>211</b>	<b>100,0</b>

$\chi^2 = 12,871$ ;  $g = 3$ ;  $P = 0,005$

<sup>14</sup> Janja Črčinovič Rozman, Matjaž Duh, *Connecting Chosen Music and Artworks*, in Tatjana Welzer Družovec et al., ed., *Information modeling and Knowledge Bases XXI*, Vol. 206, Amsterdam, Berlin, Tokyo (Washington, DC: IOS Press, 2010), p. 370–378.

Connecting the first piece of music to the paintings revealed a difference between the students from different cultural environments on the level of statistic importance (Table 1). The most students in both mentioned categories linked the *Mahler's music* to the painting C (*Circular Forms*). The second movement of Mahler's symphony was written using traditional musical language. It has a fast tempo and is rich with colorful instrumentation.<sup>15</sup> The basic musical thought is determined and repeated several times. Music expresses happiness and warmth.

Slovenian students felt a certain kinship to the music because of its use of Austrian folk melodies. The painting *Circular Forms*, which most students linked with the first piece of music, expresses a harmony of warm colors and soft forms. Delaunay's *Circular Forms* is, in spite of its softness, clearly profiled and built on traditional principles. Concentric circles, which dominate the painting, are "distributed in sectors as answers to different color-harmonies. An effect of dynamic rotation is achieved."<sup>16</sup> The color scheme, as in music, is arranged using a defined rhythm. Both parts have the construction according to traditional principles, repetition, defined rhythm, clear segmentation, color richness, softness and warmth in common.

Connecting the first piece of music to the painting of Kandinsky *Triangles in Arc* is according to the frequency of the selection of students behind the first selected painting, only slightly less than 6 %. The painting is built on a complex composition scheme, "which is significant for its architecture of abstract elements. The artist's treasure of forms consists of a fully constructed universe of circles and triangles with winding and straight lines and right angles."<sup>17</sup> The painting displays soft and sharp forms that are dominated by repeated triangles, which give a feeling of sharp points. Contrasts of warm and cold colors can also be seen. The painting has a lot of cold color, which can be connected with melancholy and sadness.

Students who had linked this painting with the music of Mahler, they combined the music and painting primarily on the expressive basis, because both express the resolution and energy. Dominant black color in the painting is not seen as something dark. Both works are clear and have defined rhythm, students did not pay attention to differences in the elements and principles of design.

Those who had selected as a harmonious relationship with the music of Mahler and the painting *Circular forms*, they responded to both works of art holistically - parts were connected on the basis of elements and principles, the artistic expression was seen in terms of warmth and tenderness and not as resolution and sharpness. A number of entities had been considered in assessing, therefore, assessment was performed at a higher level.

### *Linking the paintings to the second musical sample (Albinoni/Giazotto: Adagio)*

<sup>15</sup> *The New Grove Dictionary of Music and Musicians*, vol. XI, s.v. "Mahler, Gustav".

<sup>16</sup> Hans L. C. Jaffe, *Der Geometrische Abstraktion, Die Kunstgeschichte der Welt* (Arte, 1979), p. 75.

<sup>17</sup> Hans L. C. Jaffe, *Der Expressionismus, Die Kunstgeschichte der Welt* (Arte, 1979), p. 129.



Table 2: Distribution of connections between the second musical sample and the paintings according to the differences between Slovenian and Finnish students

Alphabets and Names of Paintings	2nd piece of music: Albinoni				Together	
	SI		FI			
	n	%	n	%	n	%
<b>A Red Spot (Kandinsky)</b>	14	13,3	15	14,2	29	13,7
<b>B Tableau II (Mondrian)</b>	28	26,7	25	23,6	53	25,1
<b>C Circular Forms (Delaunay)</b>	36	34,3	44	41,5	80	37,9
<b>D Triangles in Arc (Kandinsky)</b>	27	25,7	22	20,8	49	23,2
<b>Together</b>	105	100,0	106	100,0	211	100,0

$\chi^2 = 1,510$ ;  $g = 3$ ;  $P = 0,680$

Results of  $\chi^2$ -test (Table 2) indicate a lack of statistically significant differences between students of both cultural backgrounds concerning the relationship between sample 2 and four works of art. Like Mahler's music students experienced Albinoni's music in roughly equal numbers in harmony with the painting Circular Forms. Gentle experience of the impressionist painting, with harmony of warm colors and soft forms, gentle melodies, accompanied by warm harmonies, caused that the emotional component was in the forefront of harmony. Point of recipients view in both art works was experiencing warmth. Gentle music affected at a maximum number of students' positive emotions, therefore students did not experience slow tempo and minor tonality as an expression of sadness and darkness. This shows the liberation of color in perception and experience of contemporary artworks.

The Albinoni's music has a slow tempo and is in a minor key, both of which are usually perceived as conveying sadness. Also, the orchestration uses color contrasts between the organ and strings. The strings play freely shaped melodic lines accompanied by contrasting warm harmonies. The melody is composed in a style that is common for classical music.<sup>18</sup>

Just about a quarter of the students linked the slow tempo and minor tonality in music of Albinoni with strongly emphasized black color and sharp lines of triangles in the painting of Kandinsky Triangles in Arc. They also equated color contrast of strings and the organ with red black contrast in the painting.

Analyses of the results show that the most students in both admired categories reacted to the music, which is emphasized by a melodic melody, on the emotional and associative level. For both of these samples, expression had a strong effect on the student's reaction. In spite of this, color has a strongest influence on the Slovenian pupils. They at most connected Mahler's music to the painting Triangles in Arc.<sup>19</sup>

*Linking the paintings to the third musical sample (Sibelius: Symphony No. 1 in D-Major, third movement)*

<sup>18</sup> *The New Grove Dictionary of Music and Musicians*, vol. I, s.v. "Albinoni, Tomaso Giovanni".

<sup>19</sup> Črčinovič Rozman, Duh, p. 104.

Table 3: Distribution of connections between the third musical sample and the paintings according to the differences between Slovenian and Finnish students

Alphabets and Names of Paintings	3 <sup>rd</sup> piece of music: Sibelius				Together	
	SI		FI			
	n	%	n	%	n	%
<b>A Red Spot (Kandinsky)</b>	57	54,3	69	65,1	126	59,7
<b>B Tableau II (Mondrian)</b>	10	9,5	13	12,3	23	10,9
<b>C Circular Forms (Delaunay)</b>	15	14,3	8	7,5	23	10,9
<b>D Triangles in Arc (Kandinsky)</b>	23	21,9	16	15,1	39	18,5
<b>Together</b>	105	100,0	106	100,0	211	100,0

$\chi^2 = 4,916$ ; g = 3; P = 0,178

Connecting the third piece of music to the paintings revealed no statistically characteristic differences between the two groups of the different cultural environments (Table 3). Most Finnish and Slovenian students connect music of *Sibelius* to the painting A (*Kandinsky, Red Spot*). Sibelius' music is fast and explosive, expressing nervousness, anger and rage. The timbre is dark in tonal color and there are numerous dramatic orchestral effects. Instead of introducing the theme classically as a whole, Sibelius presents his main ideas in fragments, bits and parts of themes, "which gradually coalesce into whole in the middle of the movement. He then disassembles the theme back into the fragments he began with."<sup>20</sup> The painting Red Spot is similarly dominated by cold colors and is made up of partially composed forms mixed with soft abstract shapes. There are no realistic elements. The painting is full of anarchistic romanticism, which makes it impossible to recognize the architectonic constructiveness of the later master masons.

Both mentioned art works are not traditional created. They have dark timbre, dramatic effects, main ideas are in fragments, bits and parts, and express nervousness, anger and rage. The most students reacted to and connected the samples according to the emotional, associative and formally intellectual levels; thus taking into account several common characteristics and similarities between the artworks.

*Linking the paintings to the forth musical sample (Osterc: Nonet)*

20 Karl H. Wörner, *Zgodovina glasbe* (Ljubljana: DZS, 1992), p. 326.

Table 4: Distribution of connections between the fourth musical and the paintings according to the differences between Slovenian and Finnish students

Alphabets and Names of Paintings	4th piece of music: Osterc				Together	
	SI		FI		n	%
	n	%	n	%		
<b>A Red Spot (Kandinsky)</b>	15	14,3	14	13,2	29	13,7
<b>B Tableau II (Mondrian)</b>	56	53,3	39	36,8	95	45,0
<b>C Circular Forms (Delaunay)</b>	14	13,3	16	15,1	30	14,2
<b>D Triangles in Arc (Kandinsky)</b>	20	19,0	37	34,9	57	27,0
<b>Together</b>	105	100,0	106	100,0	211	100,0

$\chi^2 = 8,276$ ;  $g = 3$ ;  $P = 0,041$

Connecting the paintings to the fourth musical sample revealed statistically characteristic differences between the two different cultural environments groups of the students (Table 4). The majority linked to the Osterc's music the second painting Tableau II. The painting Tableau II is dominated by sharp and regular forms using primary colors separated with black. Even though the painting is lacking a central subject, it gives a feeling of order. The painting looks quite dynamic and is a typical example of neoplastic abstraction. The painting has no central subject. The right corner of the painting contains its focal balance. "Nothing is more static than the individual segments of the painting, and nothing is more dynamic than the entire composition."<sup>21</sup> Entire composition is very dynamic with strongly changing rhythms and tempos. It has no tonal center and displays unusually sharp timbre combinations and unpredictable texture changes, such as the use of polytonality and unisons. Unusual harmonies and jagged counterpoint are created by composing melodic lines "while at the same time developing a harmony that is nicely hidden under perfected chromatic textures."<sup>22</sup> Lot of the students found the above mentioned painting and music sample unusual and different from the rest.

Despite the first place the links between Osterc's music and Tableau II by Mondrian in both observed groups, on the basis of some other connections, statistically significant differences between the two artworks emerged (Table 4). Slovenian students assessed in a very large number the harmonious connection between the sample 4 and Tableau II. Finnish students in a much greater extent than Slovenian selected the connection between Osterc's music and the painting Triangles in Arc. The latter connection points to a stronger focus on the perception of experience of the Finnish students and a greater importance in assessing the sharpness of sound, which was associated with a triangular shape in the painting and a small allowance of other elements and principles. They apparently felt music and painting less strange than Slovenian students; their attention mainly attracted sharp color combinations, the presence of energy and a sense of tension and resolution.

Between Osterc's music and the painting Tableau II, there was considerable consistency. Both artworks are designed in a contemporary style, non-traditional principles

<sup>21</sup> Italo Tomassoni. *Piet Mondrian. Mojstri dvajstega stoletja*. Ljubljana: DZS, 1971.

<sup>22</sup> Niall O'Loughlin, *Novejša glasba v Sloveniji* (Ljubljana: Slovenska matica, 2000), p. 281.

of construction are used. No tonal center and a central subject are included, sharp changing of color combinations and unisons in music find equivalent in the correct forms, in the primary colors separated by black lines. Despite the static segments both artworks work dynamic.

One may find some parallels even between the Osterc's music and the painting *Triangles in Arc*. Both artworks are non-traditionally designed and congruent in sharp color contrasts and in dynamic expression. The unusual sharpness of sound in the music sample and the repetition of triangles in the painting give a sense of sharpness, unusual harmony and color combinations, and unusual combinations of textures in music create tension and a sudden feeling of packed energy and sharpness. The painting with red and black contrast and repeated triangular shapes gives a feeling of sharpness and energy.

## Conclusion

Even though we experience music and artwork completely on individual levels, there exists a tendency to express specific emotions when experiencing certain elements, principles of design and forms. The more we know about an individual piece of art, and the deeper we absorb ourselves in it, toward a harmony with the artist's attention, the more we can be perceptive and receptive. Although the deepness of appreciation is not possible to measure, our study showed that the cultural environment has an influence on the art appreciation.

We had found that in identifying similarities of some art works exist some differences according to different cultural environment. Statistically significant differences between the identification of harmonious music by Mahler and Osterc with selected artworks can be interpreted by the musical experiences and preferences that are affected by group preferences or the popularity of different music language among Slovenian and Finnish students. Slovenians prefer more melodic, catchy, mild sonorous music. The Finns, however, prefer popular music with a sharper sonority (e.g. metal). Slovenian students live under a different cultural influence and have been in the past in appreciation of artworks focused largely on the perception of catchy tunes and the experience of warmth. They appreciated the avant-garde musical compositions as unusual and sonorous very sharp. The Finnish students largely perceived the works of art as resolution and energy. Due to the familiarity with the sound sharpness they did not find the sonority of atonal music so harsh and unusual.

The students had experienced the most harmoniousness couple of art works and had the least amount of problems in linking music by Sibelius to the Kandinsky's painting *Red spot*. Both art works have between all chosen art works the most similar elements, and structure and most of students (about 60 %) were able to recognize them and respond to them with similar emotions.

On traditional music students often responded more emotionally than on avant-garde music. There is more often intellectual respond. The Albinoni's music with deep expressive, soft and melodic tune, accompanied by warm contrasting harmonies, in a number of recipients affected on an emotional way of assessing and searching for music

and art harmoniousness, because the answers were, with the exception of links to the painting *Circular Forms* (less than 40%), fairly evenly distributed between the second and third placed connection of artworks. Between the responses of students from different cultural backgrounds, there were no statistically significant differences found.

Hierarchic distinction of the cognitive from the sensory, of the mind from emotion is characteristic for children, who move progressively through stages dominated respectively by: focus on the materials, a focus on expressive properties, and a focus on issues of form and structure.<sup>23</sup> Students were often able to appreciate music holistic, but domination of one or other respond varied from one artwork to another and from one person to another.

It is nothing new that music deepens our experience of visual images. In Scheidegger's words "artistic experiences serve as a link between material welfare and emotional well-being".<sup>24</sup> Multi-sensory perception enables a deeper experience and understanding of art, therefore should be played more attention to creating a multidisciplinary approach to teaching fine art, in which the works should be presented using quality reproductions and modern technology, as well as real life interaction.

"Music as "integrative music education" or as part of "poly-aesthetic education" represents a markedly interdisciplinary, cross-aesthetic position, which includes several branches of art"....<sup>25</sup> Arguments for such approach are lot of arrays of facts and skills that are unconnected, fragmented, and disjointed. The integrated curriculum and learning approach promotes holistic education, which offer students and teachers learning experiences "that are intellectually and emotionally stimulating".<sup>26</sup> Bratanić said that "neglecting emotional experiences means "misguiding education". And art is the one that reveals things in a different light and allows that any individual can comprehend the essence of it and has his/her own feelings".<sup>27</sup> For successful arts integration the close collaboration of different teachers is required. For successful work the lifelong programs, which inform teachers about using integrated approaches, and were appropriate structures of support are in place, as well as practical suggestions for program organization, and classroom applications, are needed.

In Europe we live in many nations with different cultural identities. Already on the basis of a small number of selected examples of music and art, to establish harmonious connections between works of art, is demonstrated in our study, that in a united Europe there are cultural differences as an essential element of national identity. Their knowledge, awareness and respect can be an effective bridge to a stronger integration of different cultures and to better understanding and cooperation among nations.

<sup>23</sup> Baret, in Bresler, p. 612.

<sup>24</sup> Joseph Scheidegger, „Estetska vzgoja danes,“ *Glasba v šoli* 6 (2000): 3-4.

<sup>25</sup> Frede V. Nielsen, *Music (and arts) education from the point of view of didactic and bildung*, in Bresler, p. 276.

<sup>26</sup> Ibidem, 289.

<sup>27</sup> Marija Bratanić, *Paradoks odgoja. Studije i eseji* (Zagreb: Hrvatska sveučilišna naklada, 2002), p. 51.

## POVZETEK

Glasbena in likovna govorica vsebujeta številne povezave v njuni mnogodimenzionalni naravi. Pri obeh lahko opazujemo elemente, konture, principe oblikovanja in forme ter jih med seboj primerjamo. Kako bomo razumeli posamezne poteze umetniškega dela, je odvisno od našega znanja, kako se bomo nanje odzivali, pa od fokusa opazovanja in naših edukacijskih izkušenj kot tudi vpliva kulturnega okolja. V naši multikulturni študiji smo izvedli empirično raziskavo, s pomočjo katere smo ugotavljali harmoničnost doživljanja povezav med štirimi glasbenimi in likovnimi umetniškimi deli v dveh različnih kulturnih okoljih. Poudarek je bil na aktivni recepciji izbranih glasbenih odlomkov in ustvarjalnih odzivih nanje. Izbrana umetniška dela so uporabljala različne umetniške govornice, kontrastne elemente, strukture, forme in izraz, ki je dopuščal različne interpretacije glede na focus recipientov. Dela so bila s področja absolutne glasbe in abstraktne likovne umetnosti. Dve glasbeni deli sta bili oblikovani v tradicionalnem glasbenem jeziku, dve pa v sodobnem. Vzorec je zajemal 211 študentov razrednega pouka v slovenskem in fin-

skem (laponskem) nacionalnem okolju. Izsledki so pokazali, da obstajajo nekatere razlike v identifikaciji harmoničnosti umetniških del glede na nacionalno okolje. Ugotovljene statistično pomembne razlike med povezovanjem glasbe Mahlerja (Prva simfonija v D-duru, 2. stavek) in Osterca (Nonet) z izbranimi likovnimi deli Kandinskega (Rdeča packa, Konice v loku), Mondriana (Slika II) in Delaunaya (Krožne oblike) lahko interpretiramo z glasbenimi izkušnjami in preferencami v različnih kulturnih okoljih. Slovenski študenti so bili v večji meri usmerjeni na zaznavanje spevnih melodij in doživljanje topline; avantgardna glasbena dela pa so apprecirali kot neobičajna in zvočno zelo ostra. Finski študenti so v glasbenih delih v večji meri zaznavali odločnost in energijo; ostrina zvoka v atonalni glasbi pa se jim ni zdela zelo ostra in nenavadna. Med glasbo Albinonija (Adagio) in Sibeliusa (Prva simfonija v D-duru, 3. stavek) ter izbranimi likovnimi deli zaradi številnih skupnih značilnosti izbranih del nismo ugotovili statistično značilnih razlik. Že na osnovi majhnega števila izbranih glasbenih in likovnih del smo v naši študiji z iskanjem harmoničnih zvez med umetniškimi deli dokazali, da v Evropi obstajajo kulturne razlike kot bistveni element nacionalnih identitet.