

PAINTING AND MUSICAL COMPOSITION: STRUCTURAL CORRELATION OF TWO LANGUAGES

Stjepko Rupčić

The faculty of teacher education, University of Zagreb (Croatia)

Abstract

This work observes and tries to explain numerous structural and affective levels of visual and musical language as similarities and possible mutual incentives for creation. Throughout history, there is a constant connection between those languages, those artistic expressions/forms, trying to explain and analyse them. The paper gives examples of musical works inspired by images, as well as images created based on the inspiration of musical content. The problem of unequal presentation of two languages to students: music and art, arises in the practice of Fine Arts classes. Since the work is performed in the field of visual arts, its structure and the technical possibilities of the art technique used to perform the work are explained, while the musical structure of the piece of music, which serves as a template, is reduced to listening to the impression and feeling that the student experiences, and in such a case, he would have his own an "ad hoc" reflex of the soul should be an incentive to perform work. In such a eurythmic reaction, the child does not listen to the music, but his own unprepared reaction, and such usually ends in a pattern or noncontrolled waving-patterning, since the performance of art work, which is a creative cognitive-emotional process, is reduced to a random reaction of hand movements as a eurythmically guided part of the body. The paper emphasizes the importance of explaining to students the structure of musical language when listening to a musical template, thereby approaching the place of the composer, his way of thinking. Visual language has a number of similar expressions as musical language, which can be the basis for connecting the two structures. Music is a temporal art in the way it is performed, and for it we need to have a time section through which we perceive/listen. The visual staging of the listened musical template is subject to the rules of the visual work, which is perceived almost instantly even though it is created over a period of time. The paper talks about the benefits and at the same time the importance of performing a structural correlation between the musical and visual art fields in a way of understanding the structure of the musical text as an essential aspect of the value of the musical work, which prevents children from misunderstanding music - exclusively as entertainment, backdrops that stimulate the mood and nothing else.

Keywords: *Musical composition, painting, structural correlation, synaesthesia.*

1. Harmony as the world's determination

The Pythagoreans made a very significant claim, 'Eyes are made for astronomy, ears for harmony, and they are sister sciences.' Pythagoras saw the pitch of a music note as inversely proportional to the length of a string that creates the sound, and tonal intervals as presented in numerical ratios (Kulhava, 2016).

Emile Mâle described Gothic cathedrals/architecture of the 13th century as "frozen music" (Pastan, 2004).

Johannes Kepler devoted a great part of his time to the relationship between music and the true nature of the cosmos. In 1916, he published *Harmonices Mundi*, wherein he suggested that music intervals and harmonies describe the movement of the six planets known at the time. In the third book of the mentioned body of work, he defines consonants, dissonances, intervals (adjustments – "tuning"), their dependence on the length of a wire, and when we feel music is pleasing to hear (Plant, 1995).

In his last book, *Harmonices Mundi*, Kepler writes that the ratio of maximal and minimal angle speed of each planet, the speed on the perihelion and aphelion, is a close equivalent to the consonant interval.

Kandinsky's contemporary, mathematician and artist, Francis Warrain, and the renowned astronomer Fred Hoyle agreed that the concurrence between music ratios and planetary speed described by Kepler was "exceptionally good" (Kollerstrom, 1989, p. 167).

Warrain extended Kepler's research and found that angle speed of Uranus, Neptune and Pluto, otherwise unknown at Kepler's time, match harmonious ratios as well. Solar System's physical activity itself, which was discovered by Kepler, is directly analogue to laws of music harmony. The sphere of music is, therefore, more than an inspired poetic figure (Plant, 1995).

2. Artists between intuition and reality

Van Gogh felt that, in his painting, he inherited the role of Berlioz's and Wagner's music and that, in such a way, he creates "art for aching hearts!" Van Gogh tells us that if we want to experience the work of art in the most intense possible way, we should listen to music (Gayford, 2007, p. 190).

Anyway, whose mood has not been affected by music?!

Every day, Henri Matisse played the violin before he started to paint, considering it helped him achieve focus.

Piet Mondrian was taken by the seductive jazz, and boogie-woogie dance style in the USA... His paintings *Broadway Boogie Woogie* and *Victory Boogie Woogie* represent an homage to American music. Composer Jason Moran felt that Mondrian's *Broadway B-W 1942-1943* was actually jazz music (Moran, 2019).

J. Whistler used the following names for his paintings: *Nocturne*, *Symphony*, *Variations*, *Harmony*, *Notes*, *Scherzo*, and *Caprice 31*, whereby showing the connection between visual arts and music attracted and determined him. He stated, 'As music is the poetry of sound, so is painting the poetry of sight and the subject-matter has nothing to do with harmony of sound or of color.' (Quotefancy, nd)

Paul Cezanne was of the opinion that colours, as in music, need to be modulated.

A series of painters who were also in some kind of engagement with music strived to react in their own way by intertwining the two areas. Mikalojus Konstantinas Čiurlionis, Lithuanian artist, was also a painter and composer, and by using one idea, he created both visual art works and music compositions (Grigas, 2001).

The extent to which music and visual arts are "secretly connected" is shown in examples of Claude Debussy's compositions within the Symbolism Movement. Paul Verlaine and Gustave Mallarmé were a great support and inspiration for Debussy. The impressionistic style of painting light on the shape, and not the shape itself, that is, the sensations of impressionistic and postimpressionistic directions in painting were also noticeable in Debussy's work. They entail flickers of light in polytonal sound images that evade the pure unique tone, numerous dissonances, unannounced and unsolved/unprepared modulations, parallel chords (example), major seventh chords, chromatic inflexions, forerunners of atonal dissonances of Schoenberg, and jazzy models of harmony and textures (*Pour le piano*, 1901). Debussy diverged from the rules, introduced polychromatic principles – the same as impressionism did in painting (Shaw-Miller, 2007, p. 29).

In *Nocturnes*, players create sounds: *sur la touche* – composing pointy notes creates a divisionism painting effect, using a tongue technique on the flute, *col legno* hitting the wood on the violin, and the lowered sound of the trumpet (*mute*). He uses the pedals abundantly, introduces the third pedal, snuffing out the tone's duration before its foreseen end.

Claude Debussy is considered an impressionistic composer, although he found inspiration in his contemporaries, that is, Symbolist poets. Flickering of light, disintegration of shape's firmness in favour of the impression of light that constantly changes the sensation of objects and nature's surface – all this is "visible" in the sound of Debussy's music.

'Delaunay has tried to create a painting vibrating in harmony and tone, similar to music, which was a goal of Orphism, the name alluding to the Greek poet and musician Orpheus' (Gompertz, 2012, p. 153).

Reiner Maria Rilke wrote about Klee, 'Even if I had not known he played the violin, I would have assumed in many occasions that his drawings were almost music sheets' (Jardí, 1991, p. 8). Klee is unique and interesting due to the fact he was explicitly in favour of understanding music performance and visual art works as two separate dimensions. Klee was deeply initiated in his perception of music, and through his great devotion to music, he built a complex sensibility for musical structure, while he felt something different when constructing his skill and creativity in visual arts. The sensibility for interpretation was completely different from the creative process he developed in visual arts. It is an undisputable fact that Klee developed an exceptional refinement in playing the violin, which was impossible to suppress in his visual arts creation (Kagan, 1983).

In Klee, "music" images rest upon the pattern of a canon, harmony, counterpoint – laws of music suggest a more structured idea, rhythmically more organised, with graphic elements recognised as templates for the symbolic forms in painting. In Klee's work, music notes can be circles or rectangular surfaces of paint. In *The Fugue in Red* (1921), he suggested polyphony through multiple overlapping of sharp-edged surfaces.

3. Synaesthesia

Synaesthesia is a sensory ability, neurological phenomenon entailing the experience of a feeling based on another sense. The word originates in Greek *syn* (union) and *aesthesia* (sensation). It was used for the first time by the Pythagoreans, who perceived Nature (divine geometrical harmony) as mutual intertwining of all microcosmic and macrocosmic phenomena. With the way it is performed, mimetic painting can suggest the illusion of warmth, coldness, lightness, and weight, thus creating the effect of synaesthesia (Šuvaković, 2005). The idea of multisensory experience became actual at the end of the 19th century with Nietzsche, Freud and Jung, and it had its efficient moment when, as T. Phillips said, Kandinsky started his efforts in how to paint a symphony (Phillips, 1997).

By considering feelings a reliable orientation in realising structure, he called his painting *The Composition*, considering it, as M. Dabrowski states in the exhibition's catalogue, the consequence of both sensations and inner necessity – artist's sensory reactions to the tectonic movements in his/her soul. (Dabrowski, 1995). One of the key moments in his initiation as a visual artist sensitive to synaesthesia was listening to R. Wagner's *Lohengrin*, which made him realise that music effects images, colours, impression, and motivates art composition. 'Just as sound and rhythm are combined in music, so the shapes and colours need to be united in painting by the play of their manifold relationships' (Kandinsky, 1977).

The syntax of emotional communication is the timbre that resonates both with structures of music and visual arts. As a neurological gift, synaesthesia can be more or less developed as a transcription tool, but at the same time, neither the musician could hear or perform the tone without "seeing" its colour, nor could a painter see the colour without "hearing" it.

Kandinsky wrote that synaesthesia as a phenomenon associatively connects incentives of various areas. Certain colour is ascribed to a certain sensation of taste or smell, a sound we hear can cause a hearing sensation in the spectrum of colours. Along the same lines, a colour, with regard to its purity, tone, surrounding – its imminent context, placement in the painting's composition itself, size, shape of the surface – can create the feeling of hearing its tone and the length of duration that has the nature of sound (Kandinsky, 1977, p. 25).

In his metaphoric confessions, *Concerning the Spiritual in Art* (1977), Kandinsky says, 'Colour is a means of direct influence on the soul. The keyboard is colour, eyes are harmonies, and piano, with numerous wires, is the soul. The artist is a hand that plays, touching one or other key, causing the soul to vibrate'.

In *Concerning the spiritual in art* (1977), Kandinsky presented the tables of colours with regard to their psychological effect and music-instrumental equivalent, the world of painter's colours followed by deep emotions that almost exchange their optical-material identity.

Schoenberg implemented some of Kandinsky's suggestions with regard to colour and certain instruments by orchestrating violet for oboes, clarinets, bass clarinets and fagots (Crawford, 2017).

Kandinsky painted *Impression III (Concert)* after listening to Schoenberg's concert in 1911 in Munich, precisely under the impression of dissonance (Hahl-Koch & Crawford, 1984, p. 21).

Synaesthesia was studied within the *Bauhaus* movement. Itten, connected with mysticism, regarded his 12-colour wheel as a "sound colour circle" (Colour Music, n.d.).

The nature of human perception is entailed by its attraction to similar concepts of likeness and recognition, and that is why a change in such paradigm is a great challenge in both principle and essence. In such effort, Kandinsky could not alter the paradigm by "himself", and the music, that is, his sensibility for the area provided him with the help he needed. As this is possible and innate in music, Kandinsky managed to empower the consumer with the ability to see and enjoy individual surface of colours, their tone, relief, stroke, etc., just as in music, the listener, despite hearing the complete harmonic image, devotes oneself to hearing the colour of certain instruments, voices, rhythmic structures integrated in the layers of harmony, etc.

Closeness between Kandinsky and Arnold Schoenberg was manifested as friendship and deep understanding. Schoenberg was a composer, theorist, writer, painter – hence, nearly a mirrored reflection of Kandinsky, who was famous for his use of atonality and the creation of a 12-tonal (dodecaphony) chromatic scale. The painting style of Schoenberg was considered worthy enough for inclusion in the joint exhibition of *Der Blaue Reiter* group (*The Blue Rider*), alongside Franz Marc and Wassily Kandinsky.

Both of them believed in the beauty of dissonance in art. Kandinsky understood Schoenberg's music through his perspective of one who had always aspired to investigate music art and the way it intertwines and complements with visual arts.

4. Elements of language and structural correlation

Kandinsky is a 20th century artist whose creation was influenced by music in greater measure than any other artist's, with regard to his understanding of "music as the ultimate teacher" (Trotter, n.d.). When transcribing musical sensations into visual art forms, short tones are recognised as dots; long/lasting tones as lines; high notes as light colours, deep ones as dark colours; pale-transparent colour hues present quiet music; repetition of music elements creates rhythm, presented in sequencing art elements, strokes and shapes.

It is necessary to note numerous manifestations of visual arts and music: music entails dynamics, form, melody, harmony, rhythm, texture, timber and tonality. Visual arts contain elements such as dots, line, colour, plane, surface, volume and space as the so-called visual arts foundation, whereas composition elements – contrast, harmony, rhythm, balance, symmetry, asymmetry, proportion, domination and union – present visual arts principles.

By mastering both languages, we can transfer language sensations from one area to another; transcription is possible because of the kinship of certain characteristics of both languages. Owing to such reciprocity, it is possible at time of inspiration to structurally correlate one area to the other and, in doing so, enrich and enlarge expressive possibilities of both areas.

Why are elements of music, visual arts and composition important? It is necessary to thoroughly understand the elements at the foundation of a language, mastered by musicians, composers or visual artists (and listeners and viewers), which are combined, to realise visual arts or music idea of a work, just as chefs, knowing the quality and origins of ingredients, blend them together for good taste. Young Ivan Pogorelič introduced in his interpretation the elements that Chopin as a composer had not written, for which he was excluded from the final round of the competition. The reaction of Martha Argerich, who withdrew herself from the judging panel, calling Pogorelič a genius, which was confirmed by his future career as a remarkable pianist (Predota, 2022).

No two artists would interpret a work of art in exactly the same way, regardless of how blindly they follow the author's instructions. A refined ear recognises the interpreter based on timbre, rhythm, technical details, expression, etc. Along the same lines, the sophisticated eye recognises a non-authentic copy. Precisely deep understanding and feeling for the area's language enables us as consumers to be in touch with the state the work was created in (visual arts or music), as the state it was interpreted in (music).

The following table presents the meaning of the same concept – element, wherefrom the extent of the kinship between visual arts and music language is visible:

Table 1. Element of language and structural correlation.

ELEMENT	MUSIC	VISUAL ARTS
DYNAMICS	- type of loudness (dynamics), from very loud trumpeters in the Finale of <i>1812 Overture</i> by Pyotr Ilych Tchaikovsky to discreet pizzicato parts of string instruments in <i>Playful Pizzicato</i> , the 2nd movement of <i>Simple Symphony</i> by Benjamin Britten, when the orchestra is concerned, from <i>fortissimo</i> to <i>pianissimo</i> -expressiveness of musical performance, emotional charge input	- "Colours were dynamite for us" (Quotefancy, 2023) , gesture painting that entails the energy of "loudness" in its intensively dynamic expression, as opposed to refined layers of colour in Renaissance - Expressionism as artistic movement wherein artists express their feelings by painting their experience of the world; expression as content of the always present artist's reaction
FORM	- composition's structure	- formal content of the work (motive, composition, dimension...)
HARMONY	- harmony of the used elements, instruments, chords harmony	- harmony of colours, complementarity, balance of style
MELODY/MOTIF	- sequence of tones, composition's recognisability	- distinctness of the composition's motifs, theme
RHYTHM	- tonal length and their repetition and frequency	- type of stroke, line, materials and their repetition, exchanging the art elements
TEXTURE	- numeracy of instruments/performers, richness and layers of sound	- processing the surface, layers of paint (colour, points, hues...)
TIMBRE/VALUE	- quality of tone's colour (instruments, orchestra, musical band)	- value, value of colours, purity of colour
TONALITY/MODULATION	- major or minor scale, consonance/dissonance, dodecaphony scales, pentatonic modulation	- gradient/tone transitions, coloristic modulations

5. Upcoming synthesis

It is indisputable that light and sound frequencies, i.e., colours and musical tones, can have a therapeutic effect. Throughout history, the benefit of the soul has been associated with the art of music and painting. The human soul, with its sensitivity and corresponding readiness for the frequencies of these two arts, shows that their (musical and artistic) mutual influence is logical and inevitable. Kandinsky's manifest *Concerning the Spiritual in Art* is one of the potentially important texts for getting out of the "rabbit hole" - the search for a further identity of fine art. 'Art will unite humanity. Art is one – inseparable. Art has many areas, but all are one. Art is a manifestation of the upcoming synthesis' (Roerich, 2019).

References

- Colour Music. (nd). *Colour music in Australia: de-mystifying De Maistre*. <http://www.colourmusic.info/maistre3.htm>
- Crawford, J. C. (1974). "Die Glückliche Hand": Schoenberg's "Gesamtkunstwerk". *The Musical Quarterly* 60(4), 583-601. Retrieved February 16, 2023, from <https://www.jstor.org/stable/741766>.
- Dabrowski, M. (1995). Kandinsky compositions. New York: The Museum of Modern Art. Retrieved from https://www.moma.org/documents/moma_catalogue_448_300063127.pdf
- Gayford, M. (2007). *Musicians in Color. from The Yellow House*. London: Penguin Books Ltd.
- Gompertz, W. (2012). *What are you looking at? 150 Years of Modern Art in the Blink of an Eye*. London: Viking, Penguin Group.
- Grigas, O. (2001). *MKČiurlionis*. Retrived February 5, 2023, from ciurlionis.licejus.lt.
- Hahl-Koch, J., & Crawford, J. C. (1984). *Arnold Schoenberg, Wassily Kandinsky: letters, pictures, and documents*. London: Faber and Faber.
- Jardí, E. (1991). *Paul Klee*. London: Academic Editions. <https://www.paulklee.net//the-way-to-the-citadel.jsp>
- Kagan, A. (1983). *Paul Klee/art & music*. New York: Cornell University Press.
- Kandinsky, W. (1977). *Concerning the Spiritual in Art*. New York: Dover Publications.
- Kollerstrom, N. (1989). Kepler's Belief in Astrology. Retrieved February 6, 2023, from <https://www.skyscript.co.uk/kepler2.html>
- Kulhava, N. (2016). *Pitagorino učenje – 1. dio*. Retrieved January 23, 2023, from <https://nova-akropola.com/filozofija-i-psihologija/filozofija/pitagorino-ucenje-i-dio/>
- Moran, J. (2019). *This Mondrian painting is actually a jazz score* [Video]. Youtube. <http://www.youtube.com/watch?v=05KLW-xsoxE>
- Pastan, E. C. (2004, January 20). *Glaser, The Idea of the Gothic Cathedral*. Retrieved February 4, 2023, from <https://scholarworks.iu.edu/journals/index.php/tmr/article/view/29020/33737>
- Phillips, T. (1997). *Music in Art*. New York: Prestel.
- Plant, D. (1995). Music of the Spheres. Retrieved February 22, 2023, from <http://www.skyscript.co.uk/kepler.html>
- Predota, G. (2022, October 20). *On This Day 20 October: Ivo Pogorelich Was Born*. Retrived February 19, 2023, from <https://interlude.hk/on-this-day-20-october-ivo-pogorelichh-was-born>
- Quotefancy. (2023). *Top 7 Andre Derain Quotes*. Retrived February 4, 2023, from <https://quotefancy.com/andre-derain-quotes>
- Quotefancy. (n.d.). *Quotes of famous people*. James McNeill Whistler. Retrieved February 4, 2023, from <https://quotepark.com/quotes/1735131-james-mcneill-whistler-as-music-is-the-poetry-of-sound-so-is-painting-th/>
- Roerich, N. (2019). *Beautiful Unity*. Retrieved February 20, 2023, from <https://www.roerich.org/roerich-writings-beautiful-unity.php>
- Sagan, C. (2008). Kepler's Laws of Planetary Motion [Video]. Youtube. <https://www.youtube.com/watch?v=GcKiG-CuvtA>
- Shaw-Miller, S. (2007, August 24). *Eye-Music, Kandinsky, Klee and all that jazz*. Studio international.
- Šuvaković, M. (2005). *Pojmovnik suvremene umjetnosti*. Zagreb: Horetzky.
- Trotter, J. (n.d.). "Music is the ultimate teacher" Wassily Kandinsky. Abstracted Reality. <https://abstractedreality.com/in-harmony-wassily-kandinsky/>