

Color Notation

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Besides the apparatus of combining colors and music, there are many color notations in history as well. In the tenth century, a horizontal red line was drawn to represent the pitch F while a yellow line was added to indicate the pitch C.



After the development of the musical staff by Guido d'Arezzo in the eleventh century, more colors were added to the system of notation. In this Cistercian Neumes autograph from the twelfth century, the four-line staff was marked as yellow, green, red, green and the initials were in red, blue, or green. There is no specific literature explaining why music was notated on different colored lines and what did those colors refer to. We may speculate that those colored lines were aimed at training amateur musicians for pitches.



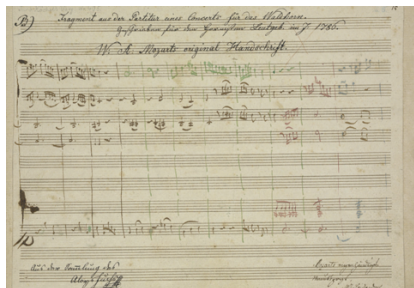
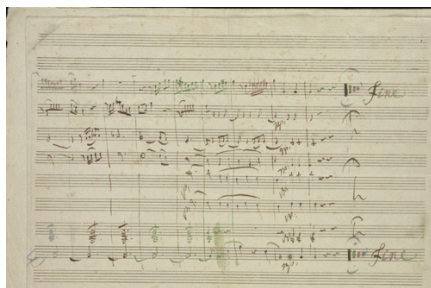
¹ <https://www.schoyencollection.com/music-notation/beneventan-neumes/antiphonal-beneventan-neumes-ms-1681>

² <https://www.schoyencollection.com/music-notation/cistercian-neumes/gradual-cistercian-neumes-4-line-staff-ms-207>

Some manuscripts from the fifteenth century had colored notations which stand for special meanings. For example, in *Eton Choirbook* circa 1490 in England, there are full notations marked in red. These red full notations always indicate a *sesquialtera* proportion. This technique was common throughout England.



Wolfgang A. Mozart used four different colors on the musical notes in his Horn Concerto No.4's manuscript. They are green, blue, red and black. In the second movement, the horn line is notated in red, then green, then black, and finally blue. The orchestral parts are in red above the blue horn line. There are several speculations about his intention of using the color-coded notations. One of the most famous is that he made a joke to his uncomplaining friend, Joseph Leutgeb, an outstanding horn player in the classical era. Other explanations suggest that those colored notations were instructions for the piece. 'Red color would mark the apparition of a thematic material; blue color would be associated with a marked eco effect; black color, the usual, would be neutral⁴.'



³ http://liturgica.com/portals/92/img/DevMan_06_lg.jpg

⁴ Berenguer Caro, M. (2018). Interpretation of Mozart concertos with a historical view. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:knh:diva-2699>

⁵ <https://www.themorgan.org/music/manuscript/115316/1>

Hallock-Greenewalt, whom I mentioned above, wrote a light score for the first movement of Beethoven's Moonlight Sonata on her *Sarabet*. As we can see, there are different specifications for the piece's execution. For example, the choices of the colors, the duration and luminosity of the colors, and so on.



Alexander Scriabin is considered to be the first person who added a color organ in a symphony work. In his symphonic work *Prometheus: The Poem of Fire, Op.60*, he added a color organ part, besides the piano, orchestra, and optional choir part. He called the instrument *Tastiera per luce*. It was invented by Preston Millar. The *luce* part appears at the top of the orchestral score. It is polyphonic. It usually has two voices. It is still written in standard musical notation on a single staff in a treble clef. The keys are based on Scriabin's color scheme.

⁶ Peacock, K.. "Instruments to Perform Color-Music: Two Centuries of Technological Experimentation." *Leonardo* 21 (1988): 397 - 406.

1 contemplatif. m.m. ♩ = 50. peu a peu animé m.m. ♩ = 96.

Luoc

Fl. Picc.

Fl. I. II. a 2. pp

Fl. III. p

Ob. I. II. f

Cor. Ingl. f

Cl. I. II. f

Cl. Basso pp *cresc.* *dim.* pp

Fag. I. p pp *cresc.* *dim.* pp *mf* *dim.*

Fag. II. III. p *cresc.* *dim.* pp *mf* *dim.*

Cont. F.

Scriabin's color scheme:

C C# D D# E F F# G G# A A# B



As we can see from the score, the two voices in the *luce* part have different functions. One voice normally moves fast. The duration of the note (light) would be various. It has more articulations (effects of the lights). It usually parallels the chord roots. The other voice always sustains. It works as a visually 'pedal point'. From mm 305-08, there are three voices marked in the *luce*. That is the only point which has three voices. The light part was never just a single effect. It is a result of composite colors from several tonalities. For example, at the beginning of the *luce* part, there is an *A* in the upper voice and an *F-sharp* in the lower voice. According to Scriabin's color scheme, *A* stands for green while the *F-sharp* stands for saturated blue. The composer visualized the colors as an allusion to the origin of life in the ocean. It was reported that Scriabin hoped Prometheus to

be provided by concealed lamps which flood the concert hall with light⁷. Color lights could represent the characteristic of the harmonic vocabulary. Scriabin used those lights to ‘make the tonality more evident⁸.’ He thought a single note had no colors if it is not in a tonality, and the major keys of C, D, B, and F-sharp have the strongest color sensations. Scriabin related C major to the color and odor of soil, and F-sharp as spiritual and ethereal. According to Charles Myers, Scriabin was aware of the change of the color before he was aware of the change of the tonality. The frequent changes of tonality give him a color-changing in intensity instead of in quality. In Scriabin’s opinion, the major and minor show the same color but the minor is paler and weaker. About Scriabin’s color scheme, it did not usually follow the rules that colors of the spectrum arranged from red to violet as parallel to an ascending circle of fifths beginning with C major. Scriabin was a member of theosophy. The order has been arranged differently compared to a logical order.

Besides Scriabin, many other composers add color notation in their scores. Arnold Schoenberg included indications of colors in his *Die gluckliche Hand (Drama with Music)*. Krzystof Penderecki had detailed colored markers on the sketches for his works including *Die Schwarze Maske*. Olivier Messiaen described his work *Piece for Piano and String Quartet* as ‘a perceived correspondence between sound and color⁹.’ Other examples are Gyorgy Ligeti’s *Artikultion* with an accompanying colored score, and John Cage’s *Aria* with a vertical position of colored lines.

⁷ Peacock, Kenneth. "Synesthetic Perception: Alexander Scriabin's Color Hearing." *Music Perception: An Interdisciplinary Journal* 2, no. 4 (1985): 483-505. Accessed December 9, 2020. doi:10.2307/40285315.

⁸ IBID

⁹ Poast, Michael. "Color Music: Visual Color Notation for Musical Expression." *Leonardo* 33, no. 3 (2000): 215-221.

No matter in what way or why the composer combines colors with music, we all agree that there is not only one way to express our feelings. The development of technology has broadened our sensations and thinking. There is never 'right' or 'wrong' for the answers of our expressions.