

Blue color traditions in Polish wooden architecture – valuable cultural heritage and a source of inspiration

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ABSTRACT

In the paper author discuss use of the blue color in the traditional Polish wooden architecture, considering its symbolic, functional and decorative aspects.

The main objective of the article is to present rich tradition of the use of blue, prevalent in rural homestead façades colorization, where this hue was common since the second half of the 19th century. Another important goal of the paper is to define and specify these factors, which influenced such popularity of the blue color in wooden architecture, along with the description of the pigments used to obtain diverse azure tones of paints as: vivianite, azurite and synthetic ultramarine.

Apart from its aesthetical value, blue color in Poland had also utilitarian functions and symbolical ones, just like tokens and magic symbols, involving the protection of inhabitants from evil, as well as connotations in Catholic religion between blue hue and Virgin Mary or Archangel Michael, as well as the Heaven itself.

Such widespread use of blue in common housing is uncommon in the world, where this hue was - only with some minor exceptions - considered “*expensive*” and thus it was used to paint the external walls extremely rare. So there is no doubt, that this blue color tradition in regional wooden architecture should be treated not only as interesting feature of past, but as valuable element of cultural heritage and a source of inspiration for contemporary architecture.

KEYWORDS

Blue color, blue pigments, color in architecture, color traditions, color symbolic, façade color, color in the built environment

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1. INTRODUCTION – PREFACE, OBJECTIVES, METHODOLOGY OF WORK, SCOPE OF ARTICLE

1.1 PREFACE

In the Slavic folk vision of the world color “siny” (herein to mean “sea blue”), next to white (of God) and black (of Evil), was eternal color, not having any beginning. Some of the old texts - as myths or folk songs - describe the initial times with the statement: “Then there was any heaven nor earth, Heaven, nor earth but the blue sea” (Libera, 1987). Due to such significant position in the hierarchy of hues, the blue color, unlike in many western European countries has always been appreciated within both Slavic and Polish cultures. High efficiency in the production of durable blue dyes for textiles makes Poles well known for their blue colored clothes [1]. The old adage from the territories of Russia, which reached Poland thanks to the Polish inhabitants of Podlasie region: “So syńia łatka - to Lach”, can be translated as: “If you wear blue robes – You must be a Pole”. Also Poles living in the regions bordering with Belarus were called “syńi łatki” (blue robes) (Skuzza, 2015).

Although blue color was present in Poles everyday clothing, in architecture it was initially not such common, due to the lack of appropriate pigments, as well as no tradition of wooden walls painting. But in the 19th century everything changed. Together with new fashion for façade decorations and pigments availability, blue hue became quickly one of the most favorable colors for the elevations of Polish rural housing.

1.2 OBJECTIVES OF WORK

The main goal of the article is to present rich tradition of the use of blue, prevalent in Polish rural homestead façades colorization, where this hue was common since the second half of the 19th century. Another important goal of the paper is to define and specify those factors, which influenced such popularity of the blue color in wooden architecture as e.g. availability of the wide range of blue pigments.

As this valuable type of wall decoration passed away – author also attempts to answer the question, if there is any possibility to use it as a source of inspiration for contemporary architecture of Polish villages.

1.3 METHODOLOGY

The analysis of the blue color use in the traditional Polish rural architecture has been conducted on the basis of the available archive materials from the National Institute for Folk Art Research, collected at the Ethnographic Museum of Krakow, documenting the colors of traditional rural facilities in different regions of Poland; illustrations and descriptions found in

literature; works of landscape painters of the 19th century and author’s own examinations of the relics of traditional architecture, collected in heritage parks as well as preserved *in situ*.

1.4 SCOPE OF ARTICLE (TEMPORAL AND SPATIAL)

All researches show, that blue painting of the wooden rural architecture had to be very popular in Poland someday. Unfortunately, due to too small amount of available materials, there is now hard to set either a range of the wooden cottages carcasses painting, nor areas of particular dyes or shades appearance. Certainly this feature was present in south, central and northeast Poland. On the south the range covers slopes of Sudety Mountains and entire Malopolska region: surroundings of Krakow, Nowy Sącz area, Lemko land, neighbourhood of Przemyśl (Medyka, Poździacz) and Powiśle Dąbrowskie (Zalipie). In central Poland the best-known sites are: Łowicz and surroundings of Opoczno and Radom – well known centers of textile weaving and dyeing. Orthodox churches painted blue are present in the northeast Poland, especially in the Podlasie region, where blue painted houses were popular as well.

As to the blue color itself, it has become commonly used in the second half of the 19th century, together with wide availability of synthetic ultramarine – the cheapest pigment for blue façade decoration. Popularity of painting walls in blue passed hundred years later with the change of main construction material from wood to brick and replacement of lime by plaster.

2. ETYMOLOGY OF THE NAME OF BLUE COLOR IN THE POLISH LANGUAGE

The oldest term to describe blue color in Poland, at first common for all Slavs, was word “sint”. In Old Polish language for blue hue two adjectives were used: “siny” and “modry”. “Siny” represented diverse tints and tones of blue – both light and dark ones [2]. Since 15th century lexeme “błękitny” was also introduced. At the beginning it was used only for bright blues. Later – together with the growing popularity of the term – its meaning covered all shades of blue. During 15th and 16th century the most popular words to express blue color in Poland were: older “modry” and newer “błękitny”. However, in the 16th century new lexeme “niebieski” appeared. At first – as “błękitny” before – it was reserved for pale blues only, but shortly it became main term to describe blue color in general (Skuzza, 2015).

In contemporary Polish language two lexemes for blue color remain: *błękitny* and *niebieski*. Term *niebieski* has wider meaning and

represents all tones of blue, while *“błękitny”* is related mostly to the middle scale of lightness, eliminating both light and dark blues. Old Polish word *“modry”* is still being used in poems and belles-lettres, while *“siny”* in relation to color means very light, pale blue, sometimes with violet tinge. Furthermore, in contemporary Polish language also non-basic terms for blue shades are being used, such as: *“lazurowy”* (azure), *“turkusowy”* (turquoise), *“akwamarynowy”* (aquamarine), *“indygo”* (indigo), *“szafirowy”* (sapphire), *“ultramaryna”* (ultramarine) etc. (Skuzka 2015).

The most common contemporary Polish name for the blue hue: *“niebieski”*, shows interesting formal and semantic relationship with the word *“niebo”* (literally: sky, heaven, meaning: firmament, the celestial body, the kingdom of heaven). Until the 16th century adjective *“niebieski”* described various relations to heaven e.g. belonging to heaven. Only subsequently it became a separate definition of the color blue, which was created by adding to the noun *“niebo”* (sky, heaven) control adjectival *“-ski”*, defining the membership to something. According to the PWN Polish language dictionary, today word *“niebieski”* means: *“having color of the clear sky”; “concerning the sky as the apparent vault of the Earth”; “for heaven as an imaginary place of residence of God, gods, angels and saints”* and metaphorically *“amazing, wonderful, celestial”* (Słownik języka polskiego, 2005). Obviously, the fact of that strong connection between blue color and the divinity and Heaven, could not remain without influence on architecture in Poland.

3. BLUE COLOR APPLICATION, FUNCTIONS, SYMBOLISM AND MEANING IN POLISH TRADITIONAL WOODEN ARCHITECTURE

3.1 APPLICATION

Blue color was used in Poland mainly for wooden

façades colorization. Appearing widely in rural architecture since the 19th century so called *“malatura”* (painting of wooden walls according to Marian Pokropek (Pokropek, 1995)), was applied differently in the various Polish regions. Generally it is possible to distinguish two main types of decorations:

- painting of simple stripes, signs and symbols on raw or painted primed carcass,
- whitewashing of whole walls, on base of yellow clay covered carcasses, with painted floral, geometric and sometimes zoomorphic and figurative motives, concentrated mostly around windows and doors.

Probably earlier chronologically is carcass painting with stripes, later color decoration of whitewashed walls (Reinfuss, 1949).

Based on survey, three main types of cottages can be distinguished with regard to the color use: *“blue”*, called in Malopolska region *“siwe”*, than not painted with blue stripes, called *“myte”* (washed) and finally painted with blue stripes (Bogdanowski, 1970).

Blue cottages were granted its color by addition of synthetic ultramarine, called *“farbka”* (paint) [3] to lime used for whitewash. The color tones ranged from a very light to quite dark, depending on the quantity of added pigment. Whitewash was laid on the base from yellow clay, which partially or even completely smoothed wooden frameworks.

In cottages type *“myte”* (washed) only painted were clay filled gaps between beams with a light or dark blue color. Beams were left natural - after a year darkening, patinating towards brown or grey, depending of wood type.

In cottages type *“w kolorowe pasy”* (colorfully striped) both beams and gaps between them were painted. That type of cottages was rich of color patterns. Beams were usually brown or ochre (referring to color of washed wood)

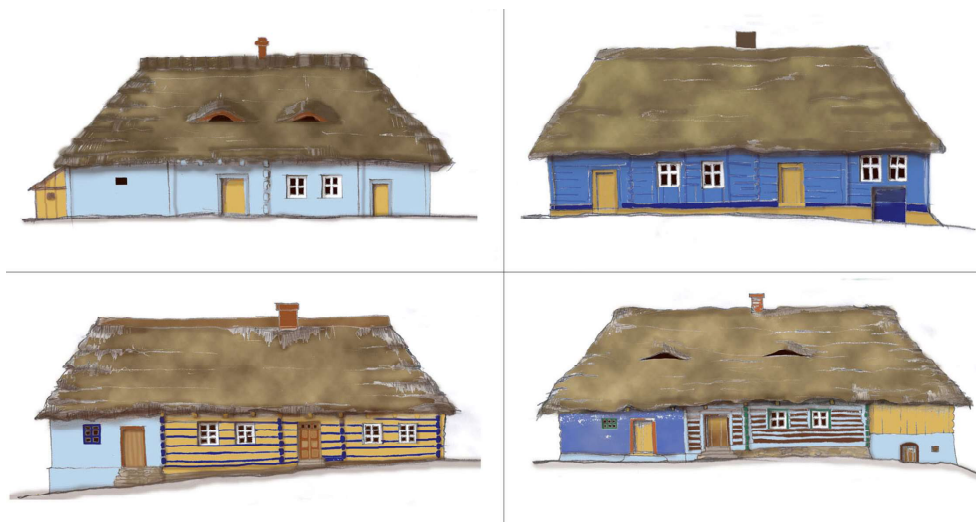


Figure 1 - Three main types of blue painted cottages – blue (two variants: light and dark blue), washed and colorfully striped (Drawings by Justyna Tarajko-Kowalska on the base of Janusz Bogdanowski original watercolor paintings from 1970 (Bogdanowski, 1970))

and seldom red. Clay was primed blue, dark blue or green. In that type plinths, windows and doors frames as well as beam-ends were also frequently painted blue or green (Tarajko-Kowalska, 2005).

3.2 FUNCTION

Wooden walls were painted for utilitarian, symbolic, informative and finally pure aesthetic functions. Main reason for carcass painting according to its architectural structure was a protection of gaps between wooden beams forming framework. These gaps were clogged with a moss, additionally covered by clay, which resulted in longer durability of such structure. Painting of beam-ends and gaps between them had also a task to protect against destruction – alike frames around windows and doors (Tarajko-Kowalska, 2005). The frequent

use of whitewash on the buildings is also an attribute that originated as a cheap method for disinfecting, based on the aseptic properties of lime. Obviously, the addition of the blue pigment to lime does not increase its protective properties, therefore, it must be admitted, that the main purpose of its use was the desire to embellish the façade. However, apart from main decorative functions, blue color had also utilitarian one, that is insect repelling. It is a well known fact, that blue hue (contrary to yellow), as a color of waters, is avoided by most insects, which must be very important when people lived in a close distance to livestock. It is not confirmed whether this method was successful, but it is also worth to mention, that widely used fungicide - mixture of copper sulfate with whitewash (known as Bordeaux mixture) was also colored light blue. This similarity of colors

Figure 2 - Detail of blue painted gaps between raw wooden framework beams and blue primed plinth of the traditional cottage in Tylmanowa village (photo by Justyna Tarajko-Kowalska 2015)



Figure 3 - Blue motifs and blue painted window and door on the whitewashed façade of the traditional house in Zalipie village (photo by Justyna Tarajko-Kowalska 2002)



could possibly confirm the conviction about the repelling or protecting properties of blue hue [4].

3.3 SYMBOLISM AND MEANING

Blue color was also used for symbolic reasons. In all regions where window and door frames were painted, blue and green hues were dominating. According to folk beliefs, so called “blue eye” or “blue beads” were supposed to protect against failure and misfortune. It is therefore possible that the blue color, just like tokens and magic symbols, involving the protection of the house and its inhabitants from evil and diseases (Cetinturk - Onur - Habib, 1999).

In medieval texts, art, theology as well as Christian church iconography symbolic content

of blue color was related primarily to the heaven and paradise. Blue filled the halos of Saints, because they mediate between the sphere of the earth and the Heaven, between people and God (Libera, 1987). In Catholic religion blue belongs to Our Lady - the Queen of Heaven, who is often present in Christian art dressed in coat in that color (Pastoreau, 2013). To this day throughout the Polish territory wayside chapels, dedicated to the Virgin Mary are often painted blue. But this blue color symbolism is most directly reflected in sacral architecture of Orthodox believers. In north-east Poland, in Podlasie region (especially in the vicinity of town Bielsko Podlaskie) many temples are painted blue. It is the color symbolizing in Orthodoxy not only the Virgin Mary, but also the Archangel Michael and the Heaven, hope and mystery of existence. Blue colored are also tombstones and roadside crosses often completed with four-leaf clover motif (Samusik, 2010). This tradition is still alive and reconstructed or renewed Orthodox temples dedicated to Mother of God or Archangel Michael, as well as other Saints e.g. St. Elias – are often repainted in saturated blue.



Figure 4 - Blue painted roadside figure of the Virgin Mary in the village near Krakow (photo by Justyna Tarajko-Kowalska 2005)

4. BLUE DYEING PIGMENTS USED FOR FAÇADE COLORIZATION

Accessibility of the diverse sources of the blue paints was one of the most important reasons for such popularity of that hue in the traditional Polish architecture. Main pigments used to obtain diverse azure tones of paints - from cyan to navy blue - were natural minerals: vivianite (known also as blue iron earth or blue ochre), azurite (mountain blue) and – last, but not least - synthetic ultramarine called “*farbka*” (paint). In



Figure 5 - Blue painted Orthodox temple dedicated to the Icon of the Mother of God “Joy of All the Afflicted” in Koterka (photo by Basia Lasocka; https://commons.wikimedia.org/wiki/File:Cerkiew_ikony_Matki_Bozej_-_Wszystkich_Strapionych_Radosc-_w_Koterce_B.jpg (Accessed on 25.02.2017))

respect of selection of shades, it is now hard to set unambiguously whether accessibility of a dye only influenced its use or there were also reasons of other nature. For sure blue mineral pigments were more popular in the areas of its occurrence, while synthetic ultramarine expanded the range of blue colorization, to all those areas where a custom of walls decorating existed already.

4.1 VIVIANITE

Vivianite, known also as blue ochre, blue ferric earth or mineral indigo, is a secondary mineral, hydrated iron phosphate, found in a number of geological environments. However in pure state vivianite is colorless, during oxidation its color shifts towards deep blue or deep bluish green crystals. It was used as a pigment - prepared by breaking, grounding and purifying - since ancient times, but it was never very popular (Scott - Eggert, 2007). Vivianite occurs in large quantities on peat lands, clays and bog ores in Bolivia, Germany, Czech Republic and Great Britain. In Poland, it is a common component of peat and bog ores in Western Pomerania, as well as near cities: Lublin and Kielce. It occurs as well in the area of Świdnica and Wałbrzych in Lower Silesia, around Siedlce, and in Jurassic rocks in the area of Łuków. Due to its wide availability vivianite was often used in these regions as an inexpensive pigment to paint rural houses in blue, in the shade similar to Prussian blue (Internetowa encyklopedia PWN, 2017).

4.2 AZURITE AND OTHER COPPER COMPOUNDS

Azurite is a common mineral - basic copper (II)-carbonate. Its name comes from the Persian "lazuhward" (meaning "blue"). Azurite powder (known also as mountain blue) has been in use as pigment since antiquity until modern times, however it is easily changing color to green, due to transformation into malachite under the influence of CO₂ (Douma, 2008). In nature, azurite is found in areas of occurrence of copper sulfides - in Poland in Świętokrzyskie Mountains (former Mount Miedzianka mine) as well as in Lower Silesia region, in the vicinity of Lubin and Głogów. It is a good type for the production of pigment: in the form of powder with a light blue shade, almost does not required grinding.

4.3 SYNTHETIC ULTRAMARINE

Synthetic ultramarine, known also as lime blue, has been obtained only in the early nineteenth century (1828) by burning of kaolin, silica, sodium carbonate, sulfur and charcoal. It has found the specific use as a detergent added to the washing for optical "bleaching" of canvases, by giving them a bluish tint. Known in Poland under the trade name "Farbka do bielizny" (paint for clothes), called shortly "farbka" (paint), was

used for rinsing fabrics - especially bed linen [5]. "Whitening" of bed linen with ultramarine must be in the late nineteenth and early twentieth century very popular throughout Poland, which is evidenced by numerous slang names to define both the action and the product itself. And so: in Malopolska "farbka" was named "siwka" or "lakmus" and rinse of the laundry: "sivić". On the Polish-Russian border these names were respectively: adjectives: "sinka", "lazurek" and verb "sinić" and in north-western Poland: "modry" / "modrzyć" or "jasny" / "jaśnić" (Zaręba, 1950). It is worth to mention that all of the names are etymologically connected with the blue color terms used at that time: "siwy", "siny", "lakmusowy" (litmus), "lazurowy" (azure) and finally "modry". As women were during that time responsible both for laundry as for house walls decorations, there is no doubt, that they are the ones behind the introduction and popularization of ultramarine in façades colorization. The product was used in small doses for "whitening" of lime as well as plaster and finally, in suitably larger amounts, for blue coloring. Depending on the quantity of dye added to lime used for priming big variety of blue shades was possible to obtain - from bluish white to navy blue or even dark blue. Such availability of blue pigment as well as long tradition of whitewash contributed both to the spread of fashion for blue walls and to the development of local differences in selection of shades [6]. For example: in 1942 in Podhale region light violet color was "obligatory" for dyeing gaps between the beams, while at the Foothills between Calvary and Krakow it was light blue (Ciołek, 1984). In Maciejowice area, close to Krakow, locals considered that dark blue houses are only these of "galicjany" (from Galicia) while locally white color was dominated (Bogdanowski, 1970).

5. BLUE COLOR TRADITIONS AS A SOURCE OF INSPIRATION IN CREATION OF CONTEMPORARY ARCHITECTURE

Nowadays most of blue painted wooden cottages were lost forever - and those left are often in very bad technical shape. Many factors were combined, that this long tradition of wooden cottages carcasses decoration disappeared, and even its elements worth preserving were distorted and simplified. Today, blue painted wooden cottages are very seldom in surrounding landscape and interest about them is very small - one can say - marginal. There are some of them in heritage parks, but still it is hard to find their unique colors in nature. Nevertheless, there is no doubt, that this blue color tradition in regional wooden architecture

should be treated not only as interesting feature of the past, but as an element of cultural heritage and maybe even a source of inspiration for contemporary architecture of Polish countryside. Obviously it is not possible to revive this tradition or directly transform the 19th century way of coloring and decorating of the walls on materially and stylistically different modern houses. However, as an example of successful use of blue color as being inspired by traditional one, author would like to present her own project [7] of wooden shelter, built in village Tylmanowa [8] in 2016. This building was designed as a part of a resting place for bikers and tourists, located on the crossing roads along river Dunajec. One of the main touristic destinations in that area is a small hamlet Brzezcie, known for a big number of well preserved and still housed blue striped cottages. In those houses raw framework beams

are usually dark brown and clay filled gaps between beams is primed in light blue tones. The selection of shades for newly built construction was similar – to serve as a kind of a informative sign and to respect the local tradition. Design has been well received and adopted color solutions fully appreciated by local people. This raises hope, that although it is not possible to fully revive the tradition of the use of the color blue, it can be not forgotten.

6. SUMMARY

Blue paint was commonly used for Polish wooden houses colorization in the second half of the 19th century. All tones of blue were common for painting walls' surfaces, clay filled gaps between beams as well as stripes around



Figure 6 - Typical blue striped cottage in Tylmanowa village (photo by Justyna Tarajko-Kowalska 2015)



Figure 7 - Contemporary wooden arbour project in Tylmanowa (photo by Justyna Tarajko-Kowalska 2016)

windows and doors. This color was obtained from commonly accessible natural minerals vivianite, azurite and especially from synthetic ultramarine added to whitewash. Blue color was used for utilitarian, aesthetical and symbolical reasons. However that tradition passed together with the change of main construction material from wood to brick and replacement of lime by plaster, it should be treated as valuable element of Polish cultural heritage. It is worth to remember that:

"In periods of sudden changes in architecture of Polish countryside, the cottages of painted carcasses, disappearing rapidly, are fine decorative factor and native form of artistic expression of Polish countryside"
(Kotula, 1951).

Figure 8 - Detail of blue painted gaps between wooden framework beams and blue primed plinth in Tylmanowa village (photo by Justyna Tarajko-Kowalska 2015)



Figure 9 - Typical blue striped cottage in Tylmanowa village (photo by Justyna Tarajko-Kowalska 2015)



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CONFLICT OF INTEREST

The author declares, that nothing has affected her objectivity or independence in the production of this work. There are no actual or potential conflicts of interest, including financial, personal or other relationships with other people or organizations within three years of beginning the submitted work, that could inappropriately influence, or be perceived to influence, this work.

NOTES

[1] Dyeing of textiles was always at a very high level among the Slavs. Also pigments were characterized by its high durability. Blue dyes were obtained using: black elder (*Sambucus nigra*), danewort (*Sambucus ebulus*), knotweed (*Polygonum aviculare*) containing indigotine, woad (*Isatis tinctoria*) as well as cornflower (*Centaurea L.*) or simply extracted from grapes, plums and berries (Skuza, 2015).

[2] Also lexeme "siwy", used in the dialects of Malopolska was derived from it

[3] See chapter 4.3 for more details

[4] This way of using blue can be also found in other regions of the world e.g. in French countryside, where rural carts were covered with blue paint called "bleu charette" or "bleu charron" - mixture of Prussian blue and barium sulphate.

[5] During the interwar period, there were in Poland three factories producing ultramarine: Pruszkow Ultramarine Factory Sommer and Nower (founded in 1903 and closed in the 60s of the twentieth century), Kalisz Steam Ultramarine Plant and Chemical Factory "Orient" Vilnius (Pajewski, 1951).

[6] As ultramarine pigment was popular not only in rural areas of Poland can be confirmed by the citation: "Prince Adam (Czartoryski) used to live in Warsaw on Senatorska street, in the dilapidated palace, known as the Blue, because it was once painted blue with washing paint" (Zbyszewski, 1939).

[7] Designed in cooperation with Przemysław Kowalski, landscape architect in 2015.

[8] Tylmanowa is located in south Poland, in the valley of the Dunajec River, on the border of Gorce Mountains and Beskid Sadecki.

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