ИСКУССТВО И КУЛЬТУРА / ART & CULTURE

УДК 130.2

CHROMATIC "ZERO SIGNS" IN MODERN PERIOD CITIES

ХРОМАТИЧЕСКИЕ «НУЛЕВЫЕ ЗНАКИ» В ГОРОДСКОЙ КОЛОРИСТИКЕ НОВОГО ВРЕМЕНИ

©*Griber Yu.*
ORCID: 0000-0002-2603-5928
Dr. habil., Smolensk State University
Smolensk, Russia, julia_griber@mail.ru
©*Грибер Ю. А.*
ORCID: 0000-0002-2603-5928, д-р культурологии
Смоленский государственный университет
г. Смоленск, Россия, julia_griber@mail.ru

Abstract. The research object is the chromatic "zero sign" understood as a meaning without a form, as an absence of positive significance, which should have been presented analogically with the other syntagmas, where a sign with the same meaning has an explicit form. The goal of the study is to undertake a theoretical reconstruction of ways and means through which "zero signs" manifested themselves in the urban space of the modern period. The paper discusses differences between "zero signs" and index signs, reveals the functions of "zero signs" in the European urban environment of the modern period. It contains the description of colour limitations and appeals for practically complete negation of colour (for usage of chromatic "zero signs") presented in the documents regulating urban colouring of Germany, France, Italy, Russia and other countries of the 18th–19th centuries. Practical recommendations of how to choose colours, suggested by F. C. Schmidt in his book "People's architect" are analysed. Content of ordinances of Paris authorities, the structure of the colour plan of Turin, related to colour decrees of the Russian Empire are discussed. The idea of imitation of the constructed urban spaces to the ancient ones is considered as a basis of colour negation in urban coloristics. It is shown that the concept of "zero sign" opens wide prospects for the analysis of sign systems outside a natural language, namely a system of urban colouring where cases of colour negation of city objects are rather frequent throughout the course of history of urban settlement development.

Аннотация. Предметом исследования является хроматический нулевой знак, понимаемый как значение без формы, как отсутствие положительного означающего, которое должно было бы иметь место на основании аналогии с другими синтагмами, где знак того же значения имеет эксплицитную форму. Цель работы заключается в теоретической реконструкции способов и механизмов манифестации нулевых знаков в городских пространствах Нового времени. Обсуждается отличие нулевых знаков от знаков–индексов. Анализируются задачи, которые решались с помощью нулевых знаков в пространстве европейских городов Нового времени. Приводится характеристика цветовых ограничений и призывов к практически полному отказу от цвета (к использованию хроматических нулевых знаков), которые содержали некоторые известные документы XVIII–XIX веков, регулирующие городскую колористику Германии, Франции, Италии, России и других стран.

Анализируются практические рекомендации по выбору цвета, которые дает в книге «Народный зодчий» Ф. К. Шмидт. Обсуждается содержание постановлений муниципалитета Парижа, структура цветового плана Турина, регламентирующие цвет указы Российской империи. Идея уподобления конструируемых городских пространств античным рассматривается как основа отказа от использования цвета в городской колористике. Показано, что понятие «нулевой знак» открывает широкие перспективы анализа знаковых систем за пределами естественного языка и, в частности, системы городской колористики, где случаи «отрицания» цвета городских объектов достаточно часто встречаются на протяжении всей истории развития городских поселений.

Keywords: colour, city, urban coloristis, sign, "zero" sign, modern period.

Ключевые слова: цвет, город, городская колористика, знак, нулевой знак, Новое время.

The question of the importance of the notion "zero" for the analysis of a language arisen by Geneva school to underline the asymmetrical dualism of the language structure allows considering a language as a system of interrelated synchronic oppositions. According to the basic principle of F. de Saussure [1] a language sets the presence of a feature in opposition to its absence. It is the "absence", in other words, the zero sign that served as the starting point for the development of a number of seminal ideas of Ch. Bally [2], which attracted attention to the role of the zero sign in morphology, syntax, grammar, stylistics and also in semiotic systems beyond the natural language.

A habit of human thinking to use oppositions, which was objected by H. Bergson [3], who thought it to be a limitation for the cognitive process, is widely used in the organization of urban colour spaces.

The chromatic "zero sign" understood as a meaning without a form, as an absence of positive significance, which should have been presented analogically with the other syntagmas, where a sign with the same meaning has an explicit form, is manifested in the urban space in a particular way (see, e. g. [4]).

On the one hand, colour is matter-of-course in an urban environment, because any colour element is material with the shadows being its features (in this case the notion "colour" includes white, grey, black colours as well as red, orange, yellow, green, light blue, blue, purple). On the other side, everyday perception considers as colour only chromatic colours (hues). And this very approach is the best for the analysis of colour representation in an urban space. According to H. J. Rieger [5, p. 11], architecture being observed from this point of view falls into black-and-white and coloured constructions. As in any language, achromatic signs (in this case colour in urban space becomes "zero", this implies that there is a lack of an element where a theory would expect one) can exist only amid chromatic (non-zero) ones, forming a complete system.

The absence of chromatic colours in an urban environment does not always correspond to a chromatic "zero sign". An art and historical–cultural context of colour absence often shows that we deal not with a "zero" sign, but with an indexical one, the sign where the signifier is caused by the signified.

Thus, towns were almost completely colourless after large and sustained social disasters — wars, revolutions, and economic crises. For instance, describing the situation typical of the rapidly developed during the Industrial Revolution European Ruhr towns in the early 20th century, A. Behne pointed out that: "European industrial towns of that time had finally reached such a phase where colour as an element was completely absent. They were grey…not because that colour was chosen for them, but mechanically, as a result of weakness and apathy of spirit" [6, p. 204].

There was a number of factors which contributed to the spreading of grey towns in the industrial areas of Europe: smog, an increase in the number of stories in buildings and the imperfection of colouring materials. Soot and smoke of factories, situated within towns negatively influenced façade colours. An increase in the number of stories in buildings (with the domination of 5-stored constructions) eliminated one of the most important colour components of urban colouring namely the roofs, which could not be seen from the ground. Besides, it was just wasteful to use paints.

In this case the above-mentioned colour dynamics did not depend upon man's choice. An achromatic urban environment was forming independently due to economic reasons and it would be more precise to observe this colour situation not as "zero", but "index" — a sign which according to Ch. S. Peirce [7] would at once lose its defining sign feature, if the object were removed, but it would not lose the feature with the absence of the interpretant. That's the case an object with a hole as a sign of a shot; there could be no hole without a shot, but the hole exists no matter whether it is connected with a shot by some brainy person or not. The form here is directly correlated with the meaning and indicates the loss of control over urban colour environment, lack of change planning and uncontrollability. In this case achromatics — absence of colour in architecture — testifies to a low colouring culture, limited financial options, and lack of necessary materials — colour carrier materials.

In contrast to such situations, we will consider "zero" sign as deliberate negation of colour, when it was used only as a material colour or its imitation. Though, S. E. Rasmussen [8, p. 217] truly notices, that it's not quite correct to define colour as "imitation" in this function, because people using colour in this way do not try to lead the others astray; for them colour is always a symbol.

The main problem, which was solved with the help of "zero" signs in European urban environment of the modern period, which followed the Middle Ages and began approximately in the 16th century, was connected with stating a conventional border between aristocracy and ordinary people.

The opposition of colour and its absence was used in urban space for a clear presentation of two status levels. The colour space took on a pyramidal structure, representing social division. "At the bottom" the urban life was colourful and filled with routine problems, senseless passions and vices. Spontaneity and impulsivity were common. Colour permissiveness became a symbol of simplicity, vulgarity and bad manners, which were associated with the lack of up-bringing. Colour images praising "high flown existence", something abstract and "symbolized" corresponded to "the top" of the pyramid. The distance between them was clearly marked, maintained and deliberately strengthened.

It cannot be said that there was total absence of colour in European urban colouring. But it's obvious, that a tendency towards rigid accuracy and an aspiration to exclude everything chaotic and deviant became one of the most important distinctive features of the Aristocratic culture. In "upper" colour space organization it was expressed in a significant reduction of colour ranges and in active dissemination of the so-called "material style" principles, where colours were used only for material imitation and thus functioned as chromatic "zero" signs. In his London lectures published in 1884 G. Semper described this style in which "every material should speak for itself (…). Brick appears as brick, wood as wood, iron as iron…" [9, p. 219].

All known documents regulating urban colouring of Germany, France, Italy, Russia and other countries of the 18th–19th centuries contained similar colour limitations and appealed for practically complete negation of colour (for usage of chromatic "zero signs") to show the aristocratic taste.

Thus, thinking about the principles of German cities colouring of that period of time F. C. Schmidt (1755–1830) writes in his book "People's architect": "Our ancestors especially in

small and medium-scale towns used all colours of the rainbow and the richer was a person, the more unusual and bright colours he chose; there are only two reasons preventing us from painting houses in all possible colours — taste and rules" [10, p. 157–158].

According to him, in order to develop taste, it's necessary to learn how to control a common aspiration for self-expression, which makes people choose showy façade colours. F. C. Schmidt suggests "negation of all gaudy colours because they are in contrast with each other and constantly blinding, causing painful reaction": "It's necessary for every building to look stable, even for wooden houses. They should look like being made of decent and excised stone. In order to put the idea into practice in future we should always choose colours similar to natural stone which is often used in a building process" [10, p. 158].

In his work F. C. Schmidt also gives some practical recommendations of how to choose colours. He uses a special colour map, made in watercolour and gouache technique. With the help of it he shows "what colours are not so contrastive to each other" [10, p. 158] and suggests 35 drafts of the "upper" colouring [10, Tab. LXXI]. In his colour compositions, the author uses 13 colour shades, which he claims to coincide with the colour of natural stone. Besides, they do not "darken" streets. F.C. Schmidt gives the following colour names: "white", "straw–yellow", "bright–yellow", "pea–green", "yellow–green", "skin colour", "yellow–grey", "pale–green", "light ash–grey or silvery", "dark ash–grey", "greyish–light blue", "reddish", "pale–brick colour" [10, p. 159]. F. C. Schmidt recommends colour shifting of separate architectural details on the basis of "light in front of dark" principle and the usage of brighter palette on the upper part of the building in comparison with its footing. The author supposes that pale colours should be dominant (the most preferable façade colours are straw–yellow, pale–brick colour and skin colour), marking prominent parts with brighter shades, footing and rustic work with darker ones. According to F.C. Schmidt, a combination of three or four colours is the best one. In the book, there are façade drafts designed by him in the forms suitable for the above-mentioned colouring rules.

A similar reserved attitude towards colour can be found in the ordinance of Paris authorities, which prescribed to use the stone colour for newly plastered buildings in the centre of the city. According to R. Porro, who published in 1979 the results of his research on the history of colour in architecture of Paris: "The only colours accepted by the prefecture are pale–white or grey stone colour and grey colour which in its lightness is close to sky blueness. Paris is dominated by calculated, revised, controlled colours which can serve as an example of elegance and rationalism–the main features of French tradition. Having refused superfluity and irrationalism of non-controlled colour usage, Paris, especially in the 19th century, pays attention to white stone colour, transformed in the course of events into dark–grey and dark colour of zinc and slate roofs. Thus, all the colour play in Paris comes down to a contrast of greyish–white façades, separated from light blue–grey sky with almost black roofs" [11].

In Italy, a colour plan of Turin of the early 19th century [12–13] became a vivid example of a document, containing a typical appeal for colour negation in decoration of "upper" official city districts and rigid standards of painting similar to modern colour passports.

Colour designing of a rapidly growing city started in Baroque period with the reign (1720–1730) of Sardinian king Victor Amadeus II. His kingdom included Sardinia, Savoy, Nice and Western Piedmont. The most important part of the country both politically and socially was Piedmont and Turin being the main city there remained the capital of the country. The Sardinian state had ambitions to play a significant part in European life and a "Colour plan" of the city was aimed at enrichment and elevation of the image of its capital.

Surviving documents from 1800–1860 contain the names of colours chosen for the main city axes and for many particular buildings situated on other streets. In the late 20th century a group of Italian researchers led by G. Brino worked out a "Colour plan of Turin" and a "colour dictionary"

with more than a hundred of articles on the basis of a detailed archive study. Names of colours given in the old documents were systematized, coded and published together with definitions, conventional signs and formulas in books "A Colour Plan of Turin 1800–1850" [12], "Colours of Turin 1801–1863" [13] and formed the basis of "Colour Dictionary of Italian Cities" [14].

According to Turin colour plan, façades and separate elements of buildings were painted as if imitating expensive construction materials (local types of building stone, marble, granite, bronze and even gold).

On the chromatic map and colour palette of Turin made by G. Brino and his colleagues can be seen the most popular shades of the main streets of the historical centre, among which are "light–grey with a shade of light–blue", "greenish–grey", "white granite colour", "grey granite colour", "dark–grey granite colour" (imitating different types of granite), "peach", "marble–grey", "black marble colour", "white marble colour", "white–grey marble colour", "marble–pink", "marble–red" (imitating different types of marble), "milk–lime", "lime colour" (imitating different types of limestone), "genuine tree colour", "hazel", "olive", "olive–green" (corresponding to the most popular species of wood)and others [14].

In Russia colour negation as the expression of aristocratic reserve and taste started in Moscow. After his visit to the city in 1816, the Emperor Alexander I: "supremely ordered buildings and fences to be painted more delicate and to use better paints, for this are light colours: wild (greyish, grey, ashy) blank (skin colour), straw colour and with a green tinge. Stone buildings can be bleached". Besides, the Emperor ordered a specially designed Building Commission while giving a plan for reconstruction or rebuilding of burnt houses "to oblige the owners to paint the houses lightly: light–yellow, pale–green, light–grey or white…" [15, p. 123–124]. The next decree dated 13 December 1817 strictly regulated Saint–Petersburg architectural colour: "…It is permitted to use only the following colours: white, straw colour, light grey, wild (silvery–grey), pale–pink, Siberian (copper–green) but mixed with a big amount of white paint" [16, p. 449].

A strict compliance with these instructions soon led to an expansion of soft and pastel shades stated by The Emperor even in small provincial towns — light yellow, pale–blue, pastel–pink, and greenish that were nor perceived as colours, because they acted only as material imitation.

Limiting the palette in such a way all the above-mentioned rules, plans, orders restrained colour urban development, trying to take control over colour chaos, being a kind of corset or a powdered wig and on the other hand — a kind of humane and socially necessary for a clear presentation of the urban status levels compulsive meaning.

The idea of imitation of the constructed urban spaces to the ancient ones was the basis of colour negation and the expansion of "zero signs" in urban coloration.

Ancient world admiration was connected with adoration of its greatness on the whole. An image of that ancient world was an ideal of wonderful and calm existence, common welfare. That's why the positions of classic art were completely secure. Under the influence of this classic art cult it was considered, that there are elementary rules of shape, in compliance to which one should build a real work of art — a separate building, a street or even a town. At that period of time people did not even think about the existence of some sense in anything but classical legacy of the ancient world. There was no other history, culture and example to imitate. It was taken for granted that history and culture as such are what they were in ancient Greece and Rome.

Looking at works of art from ancient Greece and Rome the documents of that time worked out a strict system of rules for creation an art form, demanding harmony of all parts.

But it should be mentioned that in a society where etiquette and ceremonial were the main means of supremacy, the perception of the antiquity was remarkably strange. An interest for everything ancient penetrated into all kinds of art and daily routine. In poetry, it was shown by mythology elements and Latin words used by an author to make his verse "especially beautiful". A

similar situation was in academic correspondence of the 16th and 17th centuries. The same understanding became the basis of many real–life phenomena, which as a result looked absurd and pompous. For instance, during the internment of Charles the Bold in Nancy young Lorraine duke, who defeated Charles, appeared in weeds "al 'antique" with a long, waist–deep golden beard. He thought it showed his triumph and in that fancy costume he spent a quarter of an hour in deep prayer in order to pay tribute to his enemy's body.

Speech, behaviour and clothes floridity had a direct connection with the organization of colour environment of that time. Complying with the same principles they represented a kind of social game, fulfilling an aspiration for high forms of lifestyle with the help of that fake antiquity. As a result, there was a lot of artificiality, which should make those forms obscure for ordinary people. The efforts to solve that task were intended. As well as the other models of behaviour of that time connected with high cultural level, chromatic "zero signs" were absolutely necessary not only to divide people and aristocracy but also to build firm barriers between them.

That's why "zero" colour urban spaces were relatively close. Despite the fact that discovered colour plans fitted the solutions of complex architectural tasks and possessed a feature of megalomania, which gave an opportunity to organize vast urban territories, the above-mentioned documents regulated the colouring of small urban districts namely their historical centres with their religious and state character. An ordinary person in such an environment was to be fully conscious that it was created not for him and he was not able to understand it and should not even try to do it. Megalomania manifested itself only in High Classicism, Empire style and its British variant called Regency style.

Created not for "ordinary mortals" and filled with chromatic "zero signs", colour environments of urban centres became self-sufficient, grandiose, integral and isolated from the other parts of the cities. They did not even try to fit in with the urban landscape, as if they were created on a blank space or a "drawing–board" and then were "laid on" cities clearly expressing the idea of social division.

"The antiquity imitation" principle became a kind of "corrective lens" through which people saw the world at that period of time and as a result it led to the fact, that colour images created at that time corresponded not to real ancient authors and artists, but to their understanding.

Scientists were sure that public spaces of Greek and Roman ancient cities were not painted. It was considered, that cleanness of antique plastic was directly connected with material colourlessness and white colour of its marble. J. J. Winkelmann in his work "History of Ancient Art" [17] created a wonderful image of Hellenistic society and stated the principles of timeless classic perfection. He convinced everybody that Greek culture, temples, clothes, sculptures were all white.

Consequently, materiality became the ground for a wrong analogy and a wrong conclusion. The mistake was that features, which at that level of scientific development were considered to be characteristic of some historical epoch in the course of events were considerably altered. The analogy of features being a part of urban environment colouring development had a traductive exposition pattern (A possesses features of a, b, c, d. B possesses features of a, b, c. B also possesses features of d) and implies a sign (colourlessness) shift from the standard (the ancient world) to a building of that time. It is hardly possible to apply a strict analogy while reconstructing a historical colour of urban environment due to a big number of sample buildings which are hard to classify. That's why here we deal with a non-strict analogy with only a probabilistic conclusion and it often leads to colouring distortion of particular buildings, architectural complexes and bigger parts of urban space.

An accentuated preference of natural stone colours and the usage of chromatic "zero signs" in architecture wavered in the early 19th century when a famous dispute about antique architecture

polychromy began. The most active participants of the dispute were J. Hittorf, O. Jones, G. Semper. The latter thought that natural and emotional Greeks could not live in a mono–coloured world and in 1832 Semper visited Greece and Italy where he collected much information about painted statues and houses. J. Hittorf published coloured reconstructions of Greek buildings and copied their colouring in his own constructions. A historiographical analysis and archaeological excavations in Pompeii, Paestum, Selinunte and other cultural centres of the ancient world convincingly proved the presence of colour in the decoration of ancient temples and public buildings (contemporary spectral methods confirmed that antique architectural constructions were originally painted) and gave architects of that time the right to use colour in their own projects due to the destruction of an important explanation of colour negation and preference of natural stone shades — the imitation of Antiquity. These revelations put an end to the idea of analogy, which formed the basis for usage chromatic "zero signs" in urban coloristic of Modern Age.

In general, despite quite an obvious external similarity, the chromatic "zero signs" in urban space "are read" differently, obtaining some unique shades of meaning which can be opposite to the original ones just because of a different social and cultural situation. In the article, we discussed ideas which reveal the semantics of chromatic "zero signs" used in urban spaces of Modern age cities, based on the analogy with the culture of Antiquity.

The concept of "zero" which is closely connected with the asymmetric dualism of language structure and allows to consider language as a system of oppositions opens wide prospects for the analysis of sign systems outside a natural language namely a system of urban colouring where cases of colour negation of city objects are rather frequent throughout the course of history of urban settlement development.

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Ссылка для цитирования:
Griber Yu. Chromatic "zero signs" in modern period cities // Бюллетень науки и практики. Электрон. журн. 2017. №12 (25). С. 359-367. Режим доступа: http://www.bulletennauki.com/griber-yu (дата обращения 15.12.2017).

Cite as (APA):
Griber, Yu. (2017). Chromatic "zero signs" in modern period cities. *Bulletin of Science and Practice,* (12), 359-367