

THE COLOR RECOVERY IN THE HISTORICAL CITY: COLOR AND TIPOLOGY

Authors: Jorge Llopis Verdú; Ángela García Codoñer, Ana Torres Barchino; Ramón Villaplana Guillén.
Universidad Politécnica de Valencia.

INTRODUCTION

The present communication exposes part of the results of the investigation developed by the equipment of the Politécnica University of Valencia, directed to the recovery of the chromatic characteristics of the historical urban center of the city of Valencia.

The historical center of Valencia is constituted by 5 districts of very different formal characteristics, whose original intrawalls space included a total of 3,894 parcels. This considerable urban space has undergone historically city-planning interventions of very diverse nature, that have ended at very different degrees of conservation for each one of the districts, and even for internal zones to each one of such. By all it, in the last nine years have seted out to the implied public organisms (Valencian Generalitat and the Town Hall of Valencia) the development of an assembly of the historical city chromatic studies, that, including the totality of the constructions that constitute it, they allow to establish scientific mechanisms of formal control of the facades rehabilitation processes of the historical residential constructions, and more specifically in which makes reference to the chromatic control of intervention.

COLOUR AND CITY. ANTHROPOLOGICAL VALUES OF THE COLOUR

The safeguard of the chromatic values of architectures of the historical cities represents a great interest aspect, as much architectonic as space, of the processes of city-planning recovery of our historical centers. It is not possible to understand the architectonic recovery of our cities without taking care of the own aesthetic characteristics of the buildings on which it is taken part; and from this point of view, the colour, whereas formal basic characteristic of the aesthetic criteria that sustain the architectonic compositely operation, happens in essential value.

The colour constitutes an all indissoluble one with architecture, to which it serves and that characterizes, since the process of architectonic creation is not something abstract, but that is framed, necessarily, in certain own aesthetic and figurative coordinates of the time at which the own process of invention is developed. Thus, the colour comprises of the assembly of own formal values of Architecture, so that by means of colour the formal and compositely characteristics of the same one are demonstrated. And from this previous concept, we understand that the chromatic recovery of the historical architecture must constitute, necessarily, constituent part of all process of architectonic recovery, without which the own understanding of the formal characteristics of all architecture is impossible.

But we think that colour is not so single a formal characteristic of the historical architecture, but that constitutes a patrimonial value that extends purely aesthetic criteria to become a cultural value of anthropological character, deeply taken root in the collective conscience, that gets to characterize the environmental surroundings of our cultures. The colour of the atmosphere is one of the most excellent factors of the human experience. The native territory, its geography, chromatism and light, remains always somehow in each one like primary factor of characterization in the individual and collective thing, collaborating in aesthetic values creation of different cultures. The coordinates between color and territory, definers to a great extent of the constructive materials, or the expressive values of pigmentation in traditional invoice coatings,

contribute to historical values of essential recovery for the knowledge and understanding of the tradition and aesthetic aspects that are of our own.

The historical architecture characterizes so much by a certain formal unit like by a chromatic continuity, that are product of the existence of a constructive uniformity throughout the construction process, continuity broken with the introduction of constructive techniques and modern compositivos criteria. Aesthetic and technology responds to certain historical times, which come marked by the creative thought and the technological possibilities that allow the expression of the artistic conceptions.

Thus, the preservation of the historical colour of our architectures happens in operation of patrimonial character from an ample sense, since it entails the preservation of the historical atmosphere of our historical cities, whose transformation would entail the own transformation of the urban scene. A process of urban recovery that does not take care of the colour as parameter of the operations of architectonic rehabilitation distorts the own architecture and, in last instance, destroys the own traditional urban scene.

COLOUR AND URBAN SCENE.

The second aspect that we want to expose is the relative one to the architectonic characteristics and the scale of the own studied architectures. One does not treat in this case of a program of interventions directed to the recovery of the great patrimonial architecture, but that we move in the field of rehabilitation of the own urban scene of the historical city, taking care of the residential architectures of small scale preferredly; those constructions that form the urban framework itself, and without which the processes of buildings rehabilitation of great scale, of the type of cathedrals, singular palaces or buildings, we think that it is impossible.

It does not seem that from the own theory of the urban recovery, can be questioned nowadays the necessity to come to a global recovery of the cities, not imiting the same one to singular buildings of deep historical value, but we wanted to demonstrate the same one from the own extracted statistical data in the case of the District of Carmen, one of the 5 districts in whom the historical Valencia is divided, and one of the most representative of the problematic urban recovery, as much by the type of population that inhabits it, like by the representativeness degree that it has in the imaginary group of the Valencian population.

In the case of this sector of the historical city, the chromatic study has entered a total of 693 constructions - without including the lots - which would increase the total numbers, according to calculation of the Special Plan of Protection of 1984 to 885 constructions that compose the district. The numbers relative to these constructions are the following ones:

Residential historical buildings:	532	76,77%
Historical singular buildings:	28	4,04%
Substitutions or new plant:	128	18,47%
Others (industrialists):	5	0,72%

We were, consequently, with a 77% of residential historical constructions, which constitutes, unquestionablily, a capital factor of the own urban image of the historical center. Thus, the formal control of the architectonic rehabilitation process, and more specifically, the relative one to the chromatic control of the intervention, are basic for the traditional urban scene preservation, without which we think that to speak of the historical city conservation it is always insufficient.

STUDY METHODOLOGY OF THE CHROMATIC CHARACTERISTICS OF THE HISTORICAL CITY

The historical investigation, the extraction and later analysis of original plasterings samples, as well as the typological analysis of the construction, are the three pillars that have sustained methodologically the assembly of the study operation.

Investigation of file and iconography: The main source of knowledge has been, doubtlessly, the study and analysis of the Historical. File bottoms of the Town Hall of Valencia, in that they are conserved, under epigraph of Urban Police, the totality of the files of work request presented in the Town Hall of Valencia during the 19th century. It has studied approximately 300 historical files in each analyzed district, and of course all of those that directly talk about at the moment existing constructions, and such a rigorous knowledge of the constructions compositely mechanisms, and the paper that in the same ones fulfills the chromatic processing, like basic mechanism to demonstrate the compositiva structure of the architectonic project.

The typological analysis: the relationship between typological architectonic and typological Chromatic. For the development of this type of studies, trim in the analysis of residential units on urban scale characterized by the high number of buildings to study, we considered necessary to come to the systematization of the existing construction, thus to obtain a certain unification of formal solutions and chromatic adopted. For it one has come to the unification of the constructions assembly in a series from categories or "typology", that are characterized to present a series of seemed formal characteristics. From this point of view, we raised a classification taking care of common formal characteristics, that as such we considered they can be susceptible to adopt similar chromatic solutions, which facilitates, in our case, the adoption of a simplified system of classification. The used formal characteristics for the construction classification have been the disposition of hollows, dimension and composition of such, the formal differentiation of the diverse heights or repetition of the formal characteristics of each floor in vertical sense, and the existence of common formal elements, such as skirting board, windows reframe, wrought moulding, brackets in balconies, attics, arcs or lintels on space, and decorative reasons.



Image nº1: Architectural typologies in the historical town of Valencia

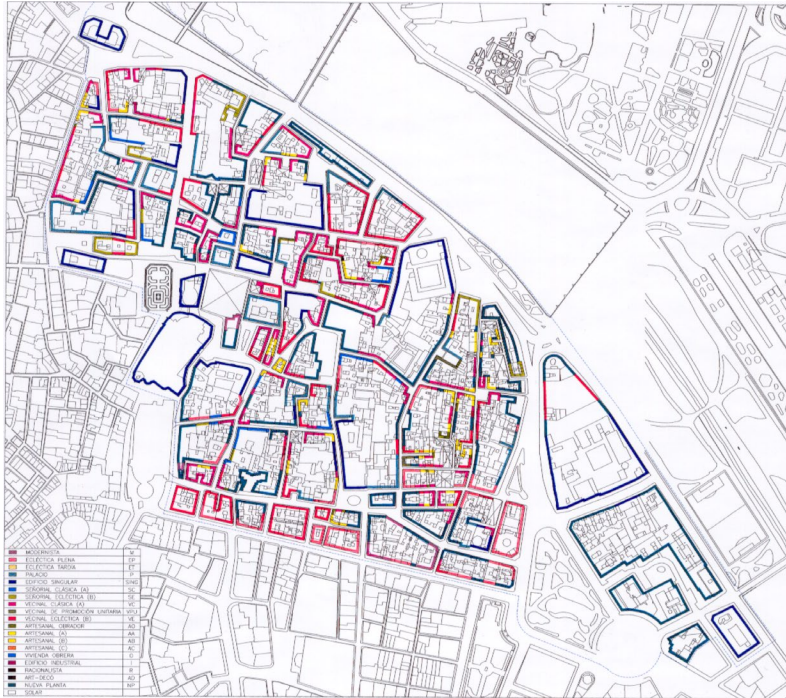


Image n°2: Tipologies in a quarter of the historical town of Valencia

Stratigraphic analyses. The third pillar of this process is the accomplishment of stratigraphic analyses on samples of conserved original plasterings. They are the base for the obtaining and knowledge of the real chromatic characteristics of each construction. The analyses process from obtained samples of the plasterings and residual paintings of the facades. These samples are analyze so much at physical as chemical level, with which the necessary data are obtained on the composition of old paintings, with which the necessary hypothesis for the corresponding chromatic renovation can be established, which to a great extent assures to us the historical fidelity necessary to proceed to the tone selection.

In a previous study to the samples extraction, a chromatic measurement of the external layer of the building in several points of the facade takes place. Measures by means of adapted colorimeters to the specific characteristics of the samples, gives results of light and chromaticity parameters, that are compared and denominated from the Munsell's Letter of Colour. In one second phase, the extracted samples of different constructions are analyzed in a laboratory to determine the different layers, identifying the chromatic variations of the colour layers. From this process it becomes possible the identification of different layers from the plasterings and paintings of the facades, and they appeared like successively have been treated in different stages or historical periods and dealt with different pigmentations.



Image n°3: Obtained samples of the plasterings and residual paintings of the facades

The type of analysis and the samples number and the made tests are based on the type of building and its technical, constructive and typological characteristics and suppose a sufficient sampling for the processing of the Chromatic Letter.

THE COLOUR IN THE HISTORICAL CENTER OF VALENCIA.

Of the made study it is possible to conclude that the colour of the historical city, and consequently the own image of the traditional urban scene, intimately is bound to the architectonic typologies that compose it, so that the architectures of every time, besides to respond to a formal and compositive criteria of an own, they intimately correspond with certain chromatic ranges, own of the prevailing aesthetic tendencies at this moment. This way, urban scopes characterized so much are generated from the stylistic point of view like from the chromatic one, in intimate correspondence with the time at which the constructions that compose it, and social classes were constructed to which they went destined, forming this way an image of the own and characterized city, that has happened in a patrimonial value worthy to be rescued.

A second aspect, directly derived from first, is the establishment of which the colour has a fundamental part in the compositive joint of the architectonic structure. The colour, either is due to the own chromatic structure of the materials, or to the own will to use colored materials, acts like differentiating element that demonstrates the composition that sublies in the building, so that the chromatic differentiation of the different elements, is fundamental to *understand* the architecture. This double slope of color as far as the part that plays in the urban scene - the zonal and typological characterization of the different districts and assemblies, and the compositive organization of the constructions that compose the city -, demonstrate the necessity of the conservation of the traditional chromatic characteristics, without which the correct understanding of the historical city and the architectures that composes it are impossible.



Image nº4: Application of the chromatic study of the historical town of Valencia to the street of "Trinquete de Caballeros"

Finally we want to emphasize the necessity of the use of technical solutions that allow to rescue the traditional formal solutions with a sufficient guarantee. Previously it has been affected already the inadequacy of the modern constructive techniques to rescue the chromatic sensation of the constructive solutions of the traditional ones. The traditional technique entails not so single a certain chromatic range, but also a series of particular characteristics with respect to the own texture of the material, and to its behavior under the light. Different, smooth or rough textures, change the perception of a same color, and is for that reason that from the perceptives or aesthetic parameters becomes a fundamental value to always consider, but specially in the case of historical architectures, since on the same one it depends, next to the value, the joint of colour and form. It is for that reason that has been recommended, for the recovery of the urban chromatic space, the use of silicate paintings, solution this one that by its adaptation to the traditional technology, allows to obtain the tones adapted with the suitable texture.