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**A CONTRIBUTION TO REVIVAL OF THE TRADITIONAL
CONURBATION OF RETHYMNON**

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A CONTRIBUTION TO THE REVIVAL OF THE TRADITIONAL CONURBATION OF RETHYMNON - Recognition of the chromatic features of the conurbation and suggestions for its conservation.

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ABSTRACT

This communication refers to suggestions made with regard to a special aspect, the chromatic one, for the solution of a recently raised problem, the revival of the traditional conurbation of Rethymnon. The general research also includes a more specific one, that of preserving the chromatic character of the material environment viewed as the main factor of the visual organization of the conurbation. It was decided that the subject of this research should be the façades of the buildings and particularly of the houses which constitute the greatest part of the elements of the environment. In the first stage of this work the recognition of the chromatic character led to tentative conclusions which were useful for the suggestions made in the second stage relating to ways of preserving the chromatic character in the existing conurbation, and a sound chromatic placement of new structures with advanced chromatic solutions within the chromatic environment.

BACKGROUND

Professor N.K.Moutsopoulos and G.Zervas, who were in charge, decided that the final object of this research would be to make tentative suggestions in connection with those elements of the conurbation that must be preserved, the removal of false elements, and more specifically, the correct placing of future new elements in the traditional conurbation to be revived. Within this framework the research of the chromatic environment was divided into two main stages: A) Recognition research of the chromatic character of the conurbation by means of the façades of the houses which are the most numerous elements of the conurbation visible to the public eye, and, consequently, determine its chromatic character, and B) suggestions for preserving this character both in the existing situation and the future development of the conurbation.

The two stages of the research are given below :

A. RECOGNITION

The elaboration of the data (taking down notes on location, collecting coloured photographs) which were collected in order to "dig out" the chromatic character of the conurbation was made in the following order: A.1. Classification of the material. A.2. Remarks on the data and on their correlation and A.3. Conclusions.

A.1 Classification: Four main categories and one specific category of structures differing in their manner of visual organization of the elements of their façades were found. These categories, as referred to below, specified by adjectives that may be unapproved but are, nevertheless, considered characteristic, are :

A.1.1 Venetian structures: The houses which show a clear influence from the time of the Venetian conquest of the conurbation. These structures may again be divided into two sub-groups according to their visual organization: A.1.1a Authentic Venetian: Main features of chromatic organization: yellowish colour with regular stone construction (in certain areas of the wall the stone is seldom covered with plaster); wooden colourless shutters, iron protection of the openings. Their main characteristic is the special form of the opening of the basic door of the house. A.1.1b More recent houses showing signs of Venetian influence. Their main features are: their narrow and comparatively high perpendicular level of their baseless façade and the almost coplanar long, narrow shutters of the openings. Very often these openings are bounded by a projecting frame of stone or plaster. Colours: walls: ochre, grey; shutters, warm or cold. Tones of earth colours and olive of a green hue.

A.1.2 Structures of the Turkish occupation. The most characteristic of these are the houses whose façades on the first and second floors (rarely on the ground floor) are covered with a wooden artistic

structure in projection on the same level as the usual stone structure (plastered) of the ground floor. The chromatic view of the whole is normally achromatic: the ground floor is white or grey and the woodwork as the shutters are of the natural colour of wood or more rarely grey tones of green or blue.

A.1.3 Structures of neo-classic organization of façades.

Their main characteristic is the plastic formation of the façades in body, base and band. This plastic form, the cornices, and the openings placed on axles, do not lend themselves for the harmonic "placement" of these façades within the group of the other façades of the conurbation. On the other hand, this formation is normally dispensed with by the use of a one-colourpaint (usually ochre) for the façade. In any case, the most usual colour in the conurbation is: rose or ochre-rouge for the first floor, or ochre or white for the ground floor or ochre for one-storied houses. The shutters are in hard blue or green or their hues.

A.1.4 Structures of popular insular (Cretan) architecture.

These structures, although representing samples of popular architecture, are inadaptable to the general form of a traditional urban conurbation. This is mainly due to elements which are "foreign" in relation to the whole: free white or blue small cubic masses and free white elements of the walls of the yards of the yards which bear intensive chromatic elements, red or caeruleum of the wooden shutters.

A.1.5 The special category of façades mentioned above includes elements which may be either the products of a specific form of damaged plaster on the façades of older structures, or they usually belong to more recent structures. The visual elements of this category are exclusively characterized by their being covered (with the exception of openings) with a strongly visible colourless plaster bearing simple engraved decorative pattern of a purely functional nature: in this way the creation of cracks in the sur-

face of the cement is avoided. The neutral grey colour of the façades makes itself strongly felt among the colours of the conurbation.

A.2 Remarks. The remarks refer to the basic conditions of chromatic organization of the façades, namely the plastic elements which affect the chromatic character of a certain conurbation, and to those which refer to purely chromatic relations.

A.2.1 The characteristic features of the plastic organization which is of decisive importance in the chromatic organization of the façades are:

A.2.1a The "soto portici" and the projecting wooden parts of the façades of the stories create large surfaces of shadows which are useful for the visual organization and variety of the whole, and which increase the degree of complexity of chromatic organization.

A.2.1b The frequently used glass sky-lights create black surfaces over the coloured surfaces of the shutters and emphasise their small chromatic intensity. The impression of an increase in the tone and intensity of the colours of the shutters is further strengthened when (as is very often the case) there are white frames of the openings which moreover contribute to the harmonious relationship between the colours of the walls and shutters according to Chevreul's basic principles.

A.2.1c The oxidation of the plaster (because of weather conditions and particularly because of the poor quality of sand) contributes to the homogeneity of the colour of the walls.

The above mentioned remarks are followed by remarks referring directly to chromatic organization.

A.2.2 It seems that the present monochromatic or achromatic condition of most of the façades of the houses of the conurbation was preceded by a period richer in colours. Both the chromatic quality

of the material used in former times and their chromatic intensity can be found in a greater variety as seen from coats of paints discovered in older structures. Venetian Reds or Sienna Brulle used today are rare just as pure ochre or pure blue Cobalt and ultramarine are rare. The deep reds have been replaced by ochre-red (deep) as seen from the brickwork with alternative ochre and burnt-terra.

A.2.3 In a group of coplanar surfaces there is often no distinction of ownership by using a different colour or by a chromatic differentiation: two characteristics which are contrary to the general rules of chromatic organization in anonymous architecture in Greece, but which are in accordance with the chromatic organization in the area of Venice, as mentioned in our previous studies. Moreover, we consider that the wide use of green for the shutters instead of the blue used in Greece is also due to Venetian influence.

A.2.4 A successful combination between colours and materials is that of the wooden floors and the façades covered with plaster. We assume that the use of the naturally achromatic materials contributes to the prominence of the coloured elements and lays down the principles of a sound architectural expression.

A.3 Conclusions. The conclusions drawn from this research of the recognition of the chromatic character of the conurbation are:

A.3.1 One level façades without base are the main features of the conurbation. The colours of these one-level façades are on the surface of the chromatic triangle formed by the chromatic points: white-ochre-rose.

A.3.2 Shutters, much richer in chromatic characteristics than walls, are on the surface of the chromatic triangles formed by the points: white-green, blue and meet in the area of green and b) ochre-burnt umber - venetian red.

In both cases the addition of white very often reduces the inten-

sity of the colours to almost achromatic cold grey and warm yellowish.

A.3.3 The natural colours of wooden panelling of the stories, of plaster and of the visible bricks contribute quantitatively to the low chromatic character of the conurbation.

A.3.4 In brief, it is possible to express the chromatic character as a whole of grey, ochre-red with "added" cold and warm elements of a low chromatic intensity.

B. SUGGESTIONS

The suggestions were divided into two groups :

B.1 Those referring to existing structures that should be preserved and B.2 Those which lay down a "strategy" for the application of general principles of colouring of future structures.

B.1 More specifically these suggestions comprise two alternatives which might facilitate the task of those experts concerned with the revival of the conurbation. These suggestions refer to the structures as grouped in the classification.

B.1.1 Venetian Structures (Authentic). Cleaning of bricks and disclosure of their real ochre colour

or

plastering and use of basic intensive colours: ochre, venetian red, blue cobalt.

B.1.2 Venetian Structures (more recent). Restoration of plaster and expression of ownership with small tonic or chromatic variations of ochre and red

or

in these cases special attention should be paid to the colour of the shutters (where they are not made of natural wood). That is, there will either be a tonic distinction (warm to warm) or nonchromatic quality of normal colours ochre-orange).

On the other hand, any change in the quality of plaster would af-

fect its homogeneity.

Finally, the restoration of damaged walls may be made with unequally baked bricks (result: ochre and pink spots).

B.1.3 Structures of the Turkish occupation: may have their woodwork painted with neutral colours (for the protection of wood)
or
their natural colour restored and glass slightly coloured added.

B.1.4 The popular insular structures must be adapted by having their large white elements coloured with related colours
or
their stone structure disclosed.

The colour of the shutters is more important :

They should be either painted in lower chromatic tones with a low chromatic intensity

or

they be made of natural wood.

B.2 The "strategy" for new structures deals, on the one hand, with what should be avoided and what should be advocated with regards to the organization of the façade and on the other hand it lays down a wide chromatic double parallel scale of colours desirable for the preservation of this conurbation.

B.2.1 The following should be avoided :

- a. numerous levels of the formation of façades,
- b. formation of a base in the façades,
- c. open spaces jutting out of the level of the façades which confuse the perception of visual organization, particularly along small, winding roads.

B.2.2 The following should be advocated :

- a. the use of frames for the openings,
- b. the organization of the façade with one level (or levels) of a height markedly more than that of its width. The same should

be valid for the proportions of the openings.

- c. preservation and building of soto portici, of projecting masses, or Jardini,
- d. the use of beton, plaster, sheets of eternite woodwork (paneling of doors and windows) and visible brickwork of ochre-yellow bricks.

B.2.3 Colouring. Traditional materials should be coloured with relevant traditional colours, while modern materials with mixed colours of traditional colouring, denoting, however, their inner "hard" and artificial texture, that is mixed colours with a greater intensity should be used. More specifically, it is suggested that cement should be coloured with orange, cobalt-violet, etc. iron with chrome-yellow, ice-blue, etc.

B.2.4 The suggestions discussed above lead to the expression of a final suggestion for the use of double parallel chromatic scale for the colouring of the façades which will preserve the chromatic character of the conurbation and more significantly will revive it.

Double parallel chromatic scale (TALENS VAN COGH 1069/8) :

a1. Venetian red	-	b1. Caput mortuum
a2. English red ⁺	-	b2. Pozzuoli earth
a3. Talens orange ⁺	-	b3. Chrome yellow orange
a4. Ochre red ⁺	-	b4. Indian yellow
a5. Yellow ochre	-	b5. Chrome yellow
a6. Terra verte	-	b6. Cinnabar green
a7. Green lake	-	b7. Viridian
a8. Cerulean blue	-	b8. Turquoise ⁺
a9. Cobalt blue	-	b9. Ultramarine light.

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