

A phenomenological approach to colour surveys in architecture

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A phenomenological approach can be effective to gather the perceptual permanent and non-permanent characteristics of a building and its environment, by bringing together, defining and illustrating different concepts to complement the standard approach to colour survey: Landscape, Townscape, Image of the City, Synaesthesia, Colourscape, Geography of Colour, Colour Loci, Emotional Atmosphere, Light and Time. Besides the phenomena themselves, these concepts emerge from the realm of Architecture, Phenomenology and Perception. To illustrate these premises, we present some results of professional practice, both as Colour Consultant and as teacher and researcher.

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Introduction

A survey is the stable foundation for any colour study in Architecture, regardless of whether it is aimed at a restoration project, at a new building or at an urban rehabilitation process. Technical surveying processes and methodologies related to the material surface composition and its colours have long been discussed, however few things have been seriously stated about the importance and the benefits of a phenomenological approach at this stage that could complement the site information and give other clues to a more adequate architectural intervention. How can we transmit the emotional atmosphere of a place, or of a certain light quality like that in Figure 1?



Figure 1: How can we transmit the emotional atmosphere of a certain place?

The aim of this communication is to state the importance of a phenomenological approach that can gather the perceptual permanent and non-permanent characteristics of the object of study and its environment, bringing together, defining and illustrating different concepts to complement the standard approach to colour survey: Landscape, Townscape, Image of the City, Synaesthesia, Colourscape, Geography of Colour, Colour Loci, Emotional Atmosphere, Light and Time. Besides the colour phenomenon field, these concepts emerge from the realm of Architecture, Phenomenology and Perception. To illustrate these premises, we present some results of practice both as Colour Consultant and as teacher and researcher at the Faculty of Architecture, University of Lisbon.

How can we characterise a place?

A place could be described through technical drawings, measures, photos, physical data and other rational tools. But how can we describe the atmosphere of a place, its emotional quality, and the way we feel there? Painting is maybe the art that is better in describing that emotion, that atmosphere of a place. Rarely is the same emotion described in architecture surveys, and it would be important if somehow they could be more emotionally driven, supporting the main critical decisions on last stages of a colour study in architecture.

We believe this insight could result in better architecture, one more related with the place and human feelings. The following concepts are well known, but intertwined together they could help to achieve that goal through a phenomenological and human-centred experience.

Landscape

I like to think of this word as being composed by two expressions LAND+SHAPE: the form of the land. The form of the land existed before human settlement and determined the latter, from the first defensive moments to the agricultural revolution, the industrial revolution, etc.

The aesthetic concept of LANDSCAPE derives from the way people “frame” a specific view of the natural scenery in order to see its elements blended in harmony. This aesthetic concept is probably as old as the human being and it was used to choose its settlements, the paths to travel through a territory, its belvederes, placement of its shrine (Figure 2), etc.



Figure 2: Old shrine, Penamacor, Portugal.

Besides the *land shape*, which is of course very important to the site's characterisation, we should deal with the presence of elements of Nature (type of stone, type of vegetation, type of soil etc.) as well as with important geographical features, like Orientation and Latitude/Longitude, which can give us different ambiances derived from the solar incidence, temperature, humidity, etc. All these land features help to characterise what Norberg-Schulz called *Genius Loci*. Since ancient Roman times people have praised the spirit of the place, something that is characteristic of a specific site. The modern concept is applied to architecture in an attempt to understand the specific characteristics of a place and helping people poetically to dwell in it: “*Architecture means to visualize the **genius loci** and the task of the architect is to create meaningful places, whereby he helps man to dwell*” [1].

In Figure 3 students had to design temporary habitations relating them with an old palace and facing a beautiful landscape view. This student studied the movement of the terrain, that creates a rounded hill, and proposed a series of small habitations with courtyards distributed in a circle and standing one above the other in order to have unobstructed views. To understand the landscape is to learn natural harmony, and as architects, it helps us to understand the role that architecture should have in order to accentuate the unique identity of a place and to promote a meaningful relationship with the human being.

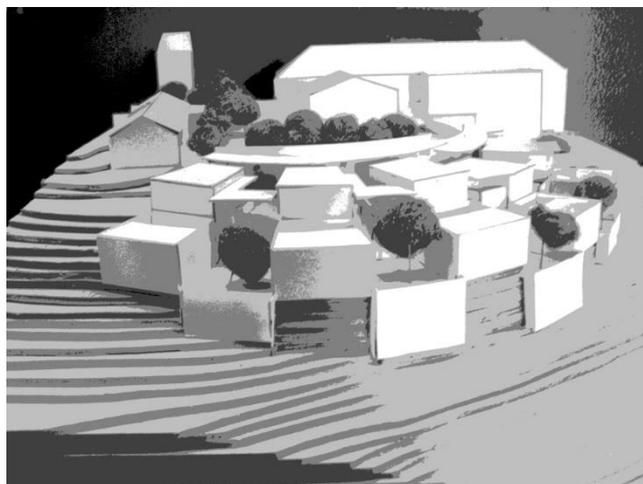


Figure 3: Student's work (Filipa Paixão), relating architecture to landscape.

Townscape

Townscape is a concept created in Gordon Cullen's book with the same name [2], which defines and organizes the quality of cities through certain perceptual concepts. One that is especially useful for this type of survey is the Serial Vision: the sequence of perceptual revelations or happenings in the street narrative that shows when we walk or drive through the urban space.

In Figure 4 we can see a photographic survey representing memorable moments of an urban stroll through Lisbon, between a square (*Largo do Intendente*) and a belvedere (*Nossa Senhora do Monte*). This information gave rise to a scenographic approach, designing small happenings to enhance certain characteristics of those specific moments.



Figure 4: Student's work (Joana Vitorino), a survey based on serial vision.



Figure 5: Student's work (Joana Vitorino). A chair to stop, sit and enjoy the view. Metal sheets on shadowed stairs reflecting the sky's light and colour.

As an example of these small but relevant happenings we see in Figure 5 a chair placed in a special location where the stairway turns leading to the belvedere, where people could rest and take a moment to enjoy the beautiful view otherwise unnoticed. At the beginning of this path we have narrow and shadowed stairs where small polished metal sheets will bring unexpected bursts of light and reflect the blue sky above.

Image of the City

Image of the City is a phenomenological approach created by Kevin Lynch [3], relating architecture with the mental image of the city that we establish in our minds. The city should be seen as an image derived from the perception of its inhabitants. The image of the city should be clear, and for that goal we should be able to identify the parts and to build a mental structure of the whole. This idea extends the notion of Townscape to the importance of synaesthesia of the senses, and to the legibility of the urban space (Figure 6).

The mental model of the city should be organised in such a way that we can easily navigate and create possible ways for going from one place to the other and establish hierarchies and urban references.



Figure 6: Lisbon and Tagus River from the top of a building (Photo: Alice Pernão).

In Figure 7 we present a work as colour consultant (with Baixa Atelier) where this concept was important: a common building was located in a special urban situation, a corner. These situations often give rise to remarkable urban landmarks, but in this case the building has no special features. In front of one of the façades stands a discrete but very characteristic villa of the beginning of the 20th century's design scheme for this touristic village near Lisboa (Cascais). One of the main features of this villa is the application of Portuguese glazed tiles in the façade (mainly Blue). As a concept, we propose to enhance the relationship with this house, and this material, and apply it to all the façade of our corner building.

This way we make our building distinctive, assuming its urban prominence, and at the same time we create a whole unity in colour and material with the villa nearby, making this place a memorable landmark in the street.



Figure 7: Transforming a common building into a reference in the street.

Synaesthesia

Synaesthesia comes from the Ancient Greek words *syn*+*aisthēsis* (together+sensation) meaning a simultaneous stimulation of two or more senses due to a sensory input. The idea that every architectural experience could derive from many senses, and not just sight, is very important to our study. Juhani Pallasmaa [4] developed this idea by putting it in contrast with the concept of *image*, which Heidegger called the fundamental event of the modern age.

During the academic survey of a chapel deconsecrated and used as a garage for many years, students felt a unique atmosphere, a sensation derived from its form, smell, temperature and obscurity. On the second floor, a window relates with the surrounding landscape in a powerful way, opening the dark interior to an explosion of light and colours.

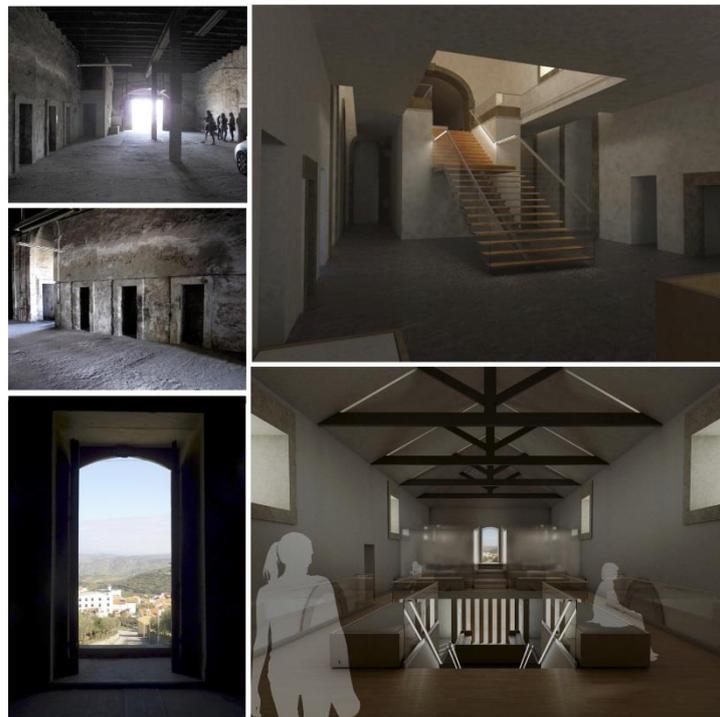


Figure 8: Student's work (Mariana Franco). A synaesthetic impression could be transmitted through architectural design.

Later, in the process of architectural design, a student adapted this space to a spa, taking advantage of its relaxing ambience, and the powerful role of that single window. The calm atmosphere felt in the visit to the place became the main architectural idea for transforming the actual use into a more appropriate one (Figure 8).

Colourscape

Colourscape is a concept created by Michael Lancaster in the book with the same title [5]. Lancaster proposed this term to designate the phenomenological reading of the urban space and how the colour of a building is contextualised in its environment. The concept, analogous to *Landscape* and *Townscape*, reveals a way to understand the hierarchies and qualities of urban space through colour perception.

We have developed a colour study, with José Aguiar, for a renovation project of a social housing neighbourhood in Chelas, Lisboa (Figure 9). We promoted centrality and hierarchy through the use of colour, more saturated in the centre and in the pedestrian street and less saturated towards the neighbourhood boundaries, relating with the surrounding white. Working with only four dominant colours, from Ochre to Red, we also strengthened its identity as a whole.



Figure 9: Urban renovation based on the concept of Colourscape.

Geography of colour

Geography of Colour is a concept created by Jean-Philippe Lenclos, arguing that we can consider a certain colour palette as characteristic of a specific place [6]. The colours of the natural environment

(stones, wood, vegetation, etc.) and the colours of the artificial environment created by man (buildings, streets, etc.), being the result of a specific interaction and coexistence between man and nature, determine this palette, which distinguishes places and cultures. He also refers to the importance of the distinction between permanent colours (stones, painted surfaces, etc.) and non-permanent colours (sky, vegetation, etc.).

In Portugal there were along the coast an enormous number of wooden huts that served as ephemeral shelters for fishermen and their families, although few remain today. They were built with wood and thatch (dry vegetation), materials found nearby, using the same skills and know-how they needed for manufacturing the boats they used. As we can see in Figure 10, habitat and construction are related in a truly sustainable cycle. The colours of vegetation, sand and mud contrast with the white painted wood and the blueness of the sky.



Figure 10: Student's work (Marta Pires). *Geography of colour, a sustainable relationship between nature and construction.*

Colour Loci (Colore Loci)

Colore Loci is a concept created by Claudia Raimondo [7], derived from *Genius Loci*, defined by Norberg-Schulz [1] to reveal the unique phenomenological characteristics of a site: *the basic act of architecture is to recognise the vocation of a place*. Raimondo applied this concept in Restoration, arguing that these values should be preserved in any architectural or urban intervention.

In our Master in Architecture degree specialisation, Interiors and Architectural Renovation, we divide our students into groups during the survey stage, each one focused on a specific architectural

element: Materials and colours of the landscape, Exterior (the building envelope), Floors, Walls, Ceiling, Windows, Doors, Stairs, Furniture, etc. Each group has to fill a record with colour, texture, and surface finish, take photos and draw each element, one for each page. This way we can go deeper into the building history and information and produce a complete survey that will characterise the building as a unique identity in a unique environment. In Figure 11 a staircase from an old sanatorium was surveyed through this method. In the written part of the record we have information about the kind of wood used for the steps, the material and colour of the handrail, etc. In the drawing we have the dimensions and form of the stairs (this record was complemented by a section of the same stairs).

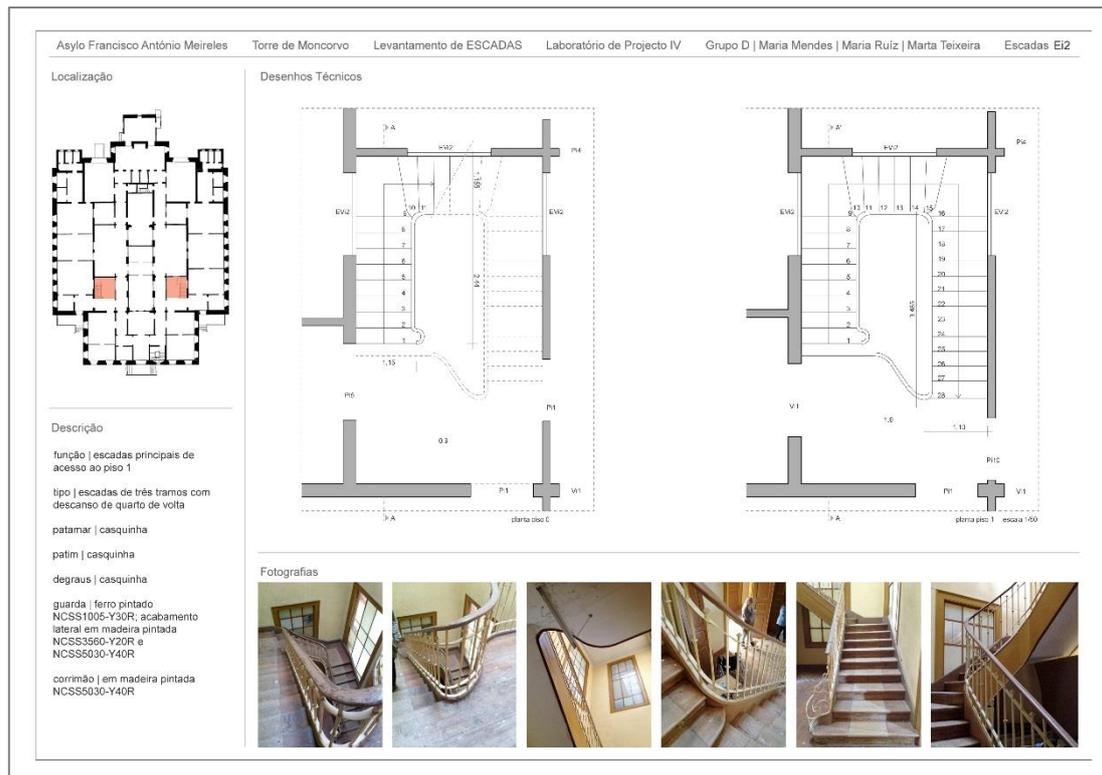


Figure 11: Student's work (Maria Mendes, Maria Ruiz, Marta Teixeira). An example of a record from the architectural survey of an old sanatorium.

Emotional Atmosphere

Emotional Atmosphere is a concept derived from the phenomenological approach of Peter Zumthor defining atmosphere as an instinctive and emotional perception [8]. Carla Lobo and João Pernão used this notion to describe colour as a sensation, a synaesthetic feeling that communicates an immediate emotion, an emotional atmosphere [9]. As we walk through our city, or enter a building, colour, materials, textures and light play a prominent role in the process involving the transmission of sensory information from our environment to our brain, and consequently in the immediate emotional atmosphere. We should take our time to analyse and describe our emotional feelings and sensations through drawings, photos, or written texts, exalting the aesthetical qualities of the space. In Figure 12, students are trying to describe the emotional qualities of an old theatre, through observation and carefully detailed registration by writing, drawing and photographing.



Figure 12: Students at work in an old Theatre in Penamacor, Portugal.

Light and Time

Light is the condition for visibility and therefore should play a determinant role in a colour survey. Natural and artificial lights are the origins of all of our visual perceptions, therefore we should give them the importance they deserve when analysing a space: where is the light coming from, what is the orientation, the intensity, and the quality of the lighting?

Time, a fundamental variable to architectural perception, is, according to Bruno Zevi, its fourth dimension [10]. This variable is responsible for the perceptual change of light and colour over a day and over the different seasons of the year, as well as the changes derived from our movement through space. The chromatic atmosphere of a space is always a diachronic impression. A student's work (Figure 13) encompasses this important relationship between light and time: a Portuguese glazed tile pattern was re-interpreted in a contemporary way as a shading element, using a perforated plate.

During the day, and with the passage of time, we will have an ephemeral appearance of the form projected over the surfaces, depending on the lighting conditions. Sometimes it will remain opaque, in shadow, and sometimes the pattern will appear, revealed by light.



Figure 12: Student's work (David Tomé). Light and Time perception.

Conclusions

In this communication we stated the main factors for a phenomenological approach in colour surveys in architecture. We believe that this insight into the practice of architectural colour survey will raise relevant information from the object of study and therefore be very useful in supporting the main decisions at later stages of the colour study in architecture.

Our goal was not to describe a methodology for architectural survey but to present an alternative approach that could complement the necessary and well-known methods.

This input could be the difference between a strictly technically driven colour study and a more human and sensory driven one, which could better understand the specific characteristics of each place and its relations with the inhabitant's or the visitor's experience.

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