'Polychrome Environments' at the Centre Pompidou in Paris: The Work of France and Michel Cler, Architect—Colour Consultants

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Abstract: A larger exhibition entitled New Presentation of the Contemporary Collections: From the 1960s to the Present entails newly designed installations of the Centre Pompidou's own holdings including a selection of works shown in 'PolychromeEnvironments'. This part of the exhibition was initiated by Cloé Pitiot and Aurélien Lemonier and evidences the emergence of anew generation of colour designers and colour consultants whose work demonstrates significantly novel approaches to dealingwith colour in industrial design and urbanism. 'Polychrome Environments' also shows how colour concepts became a notablefeature of the Post-Modern city and progressively increased in scale as they were being conceived for new town developments, transportation infrastructures, industrial parks, shopping malls and public spaces. This paper is based on an interview withFrance and Michel Cler conducted by Verena M. Schindler on the occasion of the exhibition at the Centre Pompidou thatincludes a selection of their work.

Keywords: color, pattern, harmony

1 Introduction



Fig. 1. Michel and France Cler, in front of *Tryptique Caraïbe* (Colour Chart, French West Indies, 1982, Gouache on Paper), Fonds national d'artcontemporain, Centre Pompidou. Photo: Melanie Yonge, on the occasion of the exhibition opening *Polychrome Environments*, on April 5th, 2011.

A larger exhibition entitled New Presentation of the Contemporary Collections: From the 1960s to the Present¹ entails newly designed installations of the Centre Pompidou's own holdings including a selection of works shown in 'Polychrome Environments'. This part of the exhibition was initiated by Cloé Pitiot and Aurélien Lemonier both curators – of designand architecture – at the National Museum of Modern Art Centre Pompidou. The exhibition evidences the emergence of anew generation of colour designers and colour consultants in the 1960s and 1970s whose work demonstrates significantly novel approaches to dealing with colour in industrial design and urbanism. 'Polychrome Environments' also shows howcolour concepts became a notable feature of the Post-Modern city and progressively increased in scale as they were beingconceived for new town developments, transportation infrastructures, industrial parks, shopping malls and public spaces. This paper is based on an interview² with France and Michel Cler that was conducted by the author on February 29th,

Musée National d'Art Moderne Centre Georges Pompidou, New Presentation of the Contemporary Collections: From the 1960s to the Present Environnements polychromes', Level 4, Hall 16. This interview was conducted by Verena M. Schindler, Art and Architectural Historian and a Member of the AIC Executive Committee, 2012, in Paris. Michel Cler is an Architect DESA Paris and France

Cler studied Fine Arts in Aix-en-Provence and Marseilles. They have been working together since 1969, conceiving and realising colour studies for urbanism. Their workis exhibited together with works of other colour designers working in France, such as Jean-Philippe Lenclos, BernardLassus, André and Monique Lemonnier, Fabio Rieti, Georges Patrix and Jacques Fillacier.

2 Interdisciplinary Approach and French New Towns in the 1970s

The 1970s is a particular period of time for conceiving colour concepts for urban environments in France. In 1965, aMaster Plan for the Urban Development of the Paris Region [Schéma directeur d'aménagement et d'urbanisme de la régionde Paris, SDAURP] was adopted to control urban sprawl. This policy was launched for planning new towns in previously undeveloped areas close to rapidly growing cities such as Paris, Rouen, Lille, Lyon and Marseille. In terms of integratingthis Master Plan, Michel Cler notes, "The interdisciplinary approach was key. A driving force was the teamwork of expertsfrom different fields – engineers, sociologists, urban designers, architects, landscape architects, colour designers and artists."

France Cler underlines that their work concerning urban chromatic studies was closely related to the emergence of newtowns in France and to spatial planning policy of the late 1960s. In 1969 the Regional Planning and Development Office[Établissement public d'aménagement de Lille-Est, EPALE] commissioned the Atelier France & Michel Cler colourschemes for Lille-Est, a new town located in the Triolo district east of Lille. A few years later, new commissions forcolour studies followed for four new towns surrounding Paris: Saint-Quentin-en-Yvelines, 1975; Cergy-Pontoise and

2009–2013, on February 29th, 2012, in Paris. It was realised in French for publication in the upcoming special issue of *Primaires*, edited by the Centre Français de la Couleur, member of the AIC. Marne-la-Vallée, 1977; and Melun-Sénart, 1981. The Atelier Cler also began conceiving colour schemes near Marseillesfor Rives de l'Étang de Berre, 1970, and near to Lyon for L'Isle-d'Abeau, 1979. The 1970s provided a rich and diverse experience, as expressed in the words of France Cler, "These experiences allowed us to investigate particularcharacteristics of colour in relation to landscape properties specific to certain regions. On the sociological level we also explored how local cultures were being enriched by other cultural influences, which led us to enlarge our own palette of colours to be studied and applied."

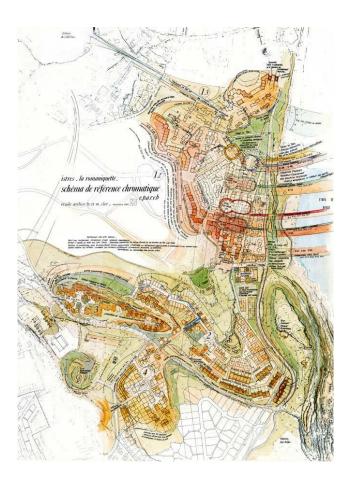


Fig. 2. France and Michel Cler, *La Romaniquette, Istres*, 1985. EPAREB, Chromatic Reference Scheme, Felt-tip Pen on Tracing Paper. © Fondsnational d'art contemporain, Centre Pompidou.

Looking back Michel Cler points out some positive aspects, "I feel lucky to have had the chance to work withadministrative decision makers who had a broad cultural outlook in addressing such issues as landscape and colour, as wellas coherent development, and were not just driven by normative intentions." He further explains how difficult the contexthad been following the immediate post-World War II period, because "white had been preferred, particularly in the senseof white signifying renewal." In this respect, colour designer France Cler recalls that at the beginning of her professionalexperience during the mid 1960s while working with different architects, "only a few architects were considering anyapplication of colour beyond 'white', which was definitively preferred as the primary way of enhancing architectural volumes."

In the late 1960s and 1970s the attitude towards colour changed radically. Michel Cler asserts, "The general notion of colour as an important basis of harmony was

introduced main feature to be addressed, especially residential developments located within natural areas. Here it is important to mention that colour - complemented by notions of scale, equilibrium, identity and being in relation to the environment – emerged as a primary design concern." However, he alsodraws attention to some difficulties: "As a result new issues arose including the following conflicts: Is urban development to be best conceived as an evolution over time requiring continuous and responsive reconsideration? Or should colourappearance be more broadly and loosely addressed in terms of largescale administrative territories under the impact of these divisions' underlying policies? In the unfortunate case of Cergy-Pontoise e.g., official chromatic studies and follow-ups simply ended when the administrative status as a new town was ended and the area was split up into various sectors assigned to different communal territories." He concludes that in the best case "a continuous chromatic development overtime and beyond political and administrative changes needs to be addressed accompanying the architectural and urbanplanning as well as the way of life of the inhabitants."

3 Chromatic Ambiences for Urban Spaces

Today Le Corbusier's 'architectural polychromy' is well known due to a large number of publications that includeexcellent colour reproductions. However, in the 1970s this was not the case. Although the current exhibition at the Centre Pompidou is using the term 'polychrome environments', the Atelier Cler did not use it at the time.

Speaking about their own approach France Cler lays great stress upon the spatial aspect by elucidating: "We called our studies 'études chromo-paysagères' [chromatic landscape studies] in order to underscore a sense of scale encompassing abroad span of landscapes ranging from local residential micro sites to large-scale urbanization projects in which therelation to natural surroundings is also considered."

On the other hand Michel Cler explains in more detail their objectives and specific approach: "The aim of our work is to conceive of and suggest chromatic ambiences for urban spaces. Essential aspects of chromatic studies include the analysis of spatial and site-specific features; evaluation of mineral and vegetal elements as well as determining different qualities of light; a synthesis of all colour findings enriched with external ones, and understanding the local architecture and culture. Later on we called this procedure Chromatictownscape [1, 4, 5]." He then points out that an exception exists: "We do notuse the word 'polychrome' except for referring to equipment used at harbours by the shipping industry."

Another connotation of 'polychrome' disquiets Michel Cler, "Academically the term itself is often employed to refer to the use of colour in antiquity. In particular, ever since the late 18th century it has been utilized in describing thereconstruction of the colour appearance of ancient monuments. Signifying 'many colours' in opposition to 'monochrome' it suggests a problematic application of colour that risks resulting in an oversaturation visually, i.e., any intended colourharmony would thereby not be achieved. Since the objective of chromatic studies is to devise colour families in harmony with the surroundings, polychromatic applications would be counter to these aims."

4 A Distinctive Way of Looking at Colour

The chromatic studies for new towns actually had an impact on other types of urbanism and architecture as well. AsMichel Cler asserts, "Chromatic studies aim for a high quality of the built environment and obviously are also concerned with maintaining the built landscape and enhancing the heritage of existing local architecture." New challenges arose tomeet the demands of regional or local administrative institutions.

And France Cler states, "In 1977 projects entailed conceiving of 'chromatic charts' for an area that didn't justencompass a town but a whole region, as, e.g., the Department of Aisne. The Architectes des Bâtiments de France [ABF,state-appointed architects responsible for the protection of historic monuments] defined extensive areas based on theparameters of geographical and architectural sites. Our work then consisted of researching chromatic families in order to establish specific and identifiable colour charts compatible with the pre-defined conditions, e.g., as we have done for the Thiérache, Brie, Soissons and Laonnois-St Quentin areas."

The approach of the Atelier Cler developed to emphasize even further the aspects of local material. In the words of Michel Cler: "Studying the interrelationship of 'light-colour-material' is fundamental in chromatic landscape studies. Italso means that any chromatic study takes the colour appearance of local building materials into consideration. The colourchart we did for Toulois, for example, led to the establishment of a collection of building material samples that had beenpresented to the public as a basis for the building permit. As mentioned earlier, any 'light-colour-material' studies have tobe evolved over the four seasons in order to bring changing conditions and effects of natural light into play [6, 7, 8, 14]." Certainly the chromatic studies for new towns surrounding Paris were the starting point of further research at a differentscale. However, a new aspect came into play. In working with small communities, Michel Cler underscores that, "the mainintention became to draw attention to a distinctive way of looking at things... a 'regard', i.e., as the way colours are subtlyperceived in everyday surroundings.

This led us to underline the importance of colour as the framework for chromaticambiences within the specific natural and built environmental contexts of towns and villages [10, 12]. Such places are especially characterized by the presence and further application of historic materials, appearances that serve to infuse theseplaces with a kind of chromatic memory. In our approach the effects of historic materials are always considered along with other chromatic aspects, e.g., those created by geological features, vegetation, such as forests, cultivated land, etc., as wellas... the shimmer, reflections and colours of water surfaces and the sky."

5 Cross-Cultural Experiences

Around 1979–1980 the Atelier Cler was commissioned by the Ministry of National Education to work in the French West Indies with the aim of analysing the geographic and cultural complexity of the architectural heritage of Guadeloupe.

France Cler explains: "We concretized our experiences in a chromatic chart used in association with the renovation ofschool and university buildings. As well, our work included sensitizing the different members of the administrativedepartment and representatives of the various consulting firms. This resulted in a long, fruitful collaboration between contractors and project architects as well as the CAUE [Council of Architecture, Urbanism and the Environment] ofGuadeloupe and Martinique." She then brings to mind the unique cross-cultural context: "The diverse origins of the region's inhabitants – African, Indian and European – are expressed by the variety of colour choices evidenced in their homes."

Referring to the colours that people with different cultural backgrounds used, Michel Cler specifies: "Indian colours –called 'z'indiennes' – include violet, turquoise and rose tints, the last being the most prevalent. African colour groups tendto variations of dark shades, such as greys, browns, dark yellows and reds, punctuated with white. Since the chromaticrelationship and signification differ between cultures it would not have been advisable, e.g., to propose Indian colours to African-origin inhabitants. However, such tendencies do not preclude new influences. For example, at this time a colourtrend coming from Florida nicknamed 'Doudouisme' resulted in the adaptation of a new pale colour palette with a decorative approach."

6 Chromatictownscape

During the 1990s the Atelier Cler also worked internationally beyond France and French territories. Through working withpeople of further various cultures France and Michel Cler experienced an input of another kind.

Michel Cler points out, "This experience strengthened our understanding of the importance of the notion of culturalcolour. We have worked in countries, such as Hong Kong and Vietnam, and since each culture has a different set ofvalues, our exposure has been extremely diverse and rich." France Cler evokes some impressions of how climate and thegeographic location affect the perception of "Hong Kong is characterized by a high percentage of atmospherichumidity. The climate results in misty, diaphanous effects that dissolve any vivid hues and create a field of depth through a diffused perspective." She further observes that colours maintained an important place in Chinese culture: "During ouranalytical phase we discovered a recurring combination of red and green that can be associated with traditional Chinese culture, as well as golden yellow, which also appeared often."

The Atelier Cler's colour design projects in Hong Kong were manifold. Michel Cler talks about the beginnings: "For theHighways Department we worked on colour schemes for footbridges that were intended to ensure a visual connectionbetween two main parts of the city's central area, which had been divided by highways running along the seacoast of Hong Kong Island." France Cler points out that their chromatic studies were also influenced by the traditional philosophy: "Aswell, following principles of Fengshui we defined aspects of 'colour-material' for the building and surrounds of theScience Museum in Tsim Sha Tsui East. The colour concept for the ceramic cladding included graded shades of rosesenhanced with contrasting ash grey turquoise."

Besides chromatic studies for transportation structures [9], cultural centres and public spaces the Atelier Cler alsoworked for the Hong Kong Housing Authority on new public housing developments generally composed of high building towers arranged symmetrically. Some details are given by Michel Cler: "The housing towers were juxtaposed next to eachother, which served as the defining framework for public space. The closer the high-rise buildings were situated next toeach other, the lighter the colours that were used at the first levels in order to reflect natural light into the public space areas. The material applied to the building surface was a mixture of paint and mosaic pieces called 'pâte de verre' [glasspaste]. Reproducing a specific colour uniformly posed technical problems. This led us to create an aggregation of three orfour nuances of the same colour that was then applied to the building surface. We called this application a 'jumble'. Weconceived a collection of colours that were referenced by notations of the Natural Colour System (NCS), a standard operational system comprehensible to all the different nationalities of the professionals working with

us, such as Chinese, English, Japanese, Dutch and others..." The results of these chromatic studies were communicated in a printed foldout, as France Cler asserts: "The HousingAuthority entrusted us with preliminary chromatic studies for a large number of residential developments located onvarious sites with different geographical characters. Some were situated within an urban context, while others were in valleys, on hills or at the seaside. The results of the chromatic analysis and synthesis were published in 1993 in a brochure entitled 'Harmony Chromatic Chart' that has been widely distributed to local architects."

7 Colour Chart for the Industry

The Atelier Cler also worked for the industry, in particular for an industrial park near Lyon [2, 3, 4]. Was their approach in this situation different?

France Cler answers: "Our actual approach for this project was defined in collaboration with decision maker and at thattime the director of the Parc Industriel de la Plaine de l'Ain [PIPA, Industrial Park of the Ain Plain] Gérard Rohart andlandscape architect Michel Bourne. Beginning in 1976 the long-term project was continued through regular operational follow-ups until early 2011."

The importance of the client's policy and philosophy is also evoked by Michel Cler: "The approach included an analysisand synthesis similar to those we had developed for urban environments. However, open-mindedness combined with adistinct way of looking at things and the convergence of particular mentalities of economic development... determined theprocess and outcome. Rohart wanted to introduce environmental qualities to the industrial area to make it attractive and harmonious in terms of materials and colours. The aims also included enhancing the distinctive identity of the industrialpark and providing a sense of comfort and well-being for the people working there."

France Cler provides some other interesting statements: "Materials used in such an industrial context are obviouslydifferent from those that are conventionally used in, e.g., residential projects. A main difference, however, is the fact thatthe number of colour options for industrial application is more limited. This induced us to contact manufacturers aboutincreasing their colour palettes. An overall chromatic scheme for general orientation was created. Then proceeding from this overall scheme different main colour families were defined to create identifiable micro spaces. As developmentprogressed regular and refined operational followups not only enabled the realization of individual industrial buildings, but also facilitated the concrete specification and further definition of the original overall chromatic scheme."



Fig. 3. France and Michel Cler, Parc Industriel de la Plaine de l'Ain, 2003. Operational Colour Palette "Lumière-Matière-Couleur". © Atelier Cler. [above]. France and Michel Cler, Z.I. de la Plaine de l'Ain, 1978. Existing Cold and Warm Colour Palette. © Atelier Cler [below].

France and Michel Cler's thirty-five-year engagement for establishing harmony between industrial buildings and their surrounding environment was a successful endeavour. Michel Cler summarizes: "This on-going qualitative approach to the appearance of colour in the industrial park substantially contributed to its being the first European industrial park to benominated for and certified with the international environmental management system standard International Organization for Standardization ISO 14001 and included within the European Eco-Management and Audit Scheme [EMAS] Register."

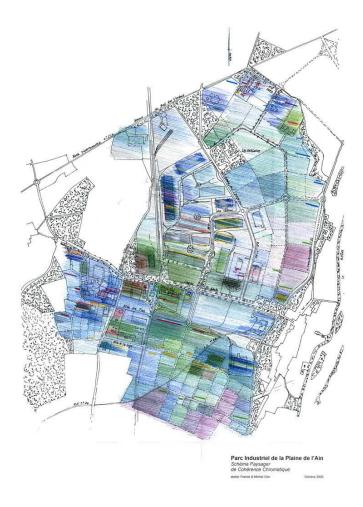


Fig. 4. France and Michel Cler, Parc Industriel de la Plaine de l'Ain, 2002. Landscape Chromatic Coherence Scheme. © Atelier Cler.

8 New Material Effects

An especially important change during the last ten to fifteen years has been the change in the visual quality of buildingmaterials.

Michel Cler underlines this new aspect: "The introduction of new materials with 'effect pigments' that animate building cladding under diverse light conditions and the viewer in motion is very important. A palette of 'flat colours' is therebyenriched by moiré or wavy, metallic, nacré or pearlescent, as well as

iridescent colours. These surfaces acquire visualdepth and chromatic complexity; they appear and disappear, become brighter or reflective, and also have the ability to change their chromatic appearance from one hue to another. This kind of effect is much more dynamic than the results offake wood, stone... [13]"

Materials with novel effects intrinsically dependent from light [11] belong to France Cler's long-cherished domain: "The play of reflection, transparency and opacity enriches the range of appearances making the overall effect more sophisticated. It seems that the development of glass and methacrylate plastics has followed a similar course in whichpigments are being integrated with iridescent effects. This kind of progress is also unfolding in the field of paint and coatings. Still, as with traditional materials, light is the permanent element, the most obvious and necessary aspect to be considered in chromatic work, a feature which remains independent, omnipresent and has its own rhythm and shimmer."

At the end of our interview, Michel Cler concludes: "As suggested earlier, two important concerns in the methodology of our colour studies include the cultural aspect and memory of a site. Urbanistically speaking any existing continuity, such as new forms of tradition and newly evolving long-term developments, has to be explored and accentuated. Theseaims are challenging in the face of today's increasing speed of perception and acceleration of the sense of time, which hasgenerally led to scattered and unconcentrated awareness of the surroundings. The trend is that an increasing quantity ofinformation is directed at the senses, but much of this remains unnoticed or gets filtered out. The overall result is a loss ofcoherency within and between contexts and significations. Therefore new approaches have to be explored to address aneven more complex interrelationship between 'light-colour-material' and sense of both time and place."

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