The creation of wide open spaces within new public housing districts has been one of the major aspects of urban planning after World War II in France. However this open space—or landscape architecture dimension— is also one of the less considered today, both in term of historical knowledge and of potential for regenerating those spaces.

This period of urban development is generally associated with operations that didn't take into account landscape and where landscape architects were absent as “tabula rasa” clearly evokes a lack of interest for the site dimension.

The reality is much more complex and not only bears witness to the development of contemporary landscape design approaches and practices, but provides references in the way site qualities have been involved in the creation of those districts. Today many of these places are being demolished or transformed by cutting up and closing their open spaces.1

Our reflexion is based on the assumption that it is impossible to dissociate the design of housing development from its outside spaces without considerably diminishing its qualities of use, management and change, though such a view is rarely the case today. Not only landscape dimension might provide economically realistic alternatives to demolition, but it could also enable to adapt them to current issues -such as sustainability.

The presentation is based on 3 case studies that are part of a survey2 commissioned by DAPA (Direction de l’Architecture et du Patrimoine, department of Architecture and Heritage, Ministry of Culture) which questions the landscape dimension in 280 major housing schemes all over France, among which 60 districts have been visited and 10 have been deeply examined through archives.

To analyze the landscape design components of these housing projects, three scales are considered: the territory and the site (topographic insertion, major sights, and urban limits), the master plan and the areas of socialization (road levelling, building implementation, landscape arrangement) and, lastly the practices and materiality (details, plantations…).

The relation between the landscape project and the dimension of time - the differences between planning and realization, the vagaries of management, etc. - the very essence of this "art of planning the unpredictable", induces to develop original methods of investigation and historical reading.

In our 3 case-studies, the historical knowledge based on archives confronted to current observations shows how these original proposals involved the existing site dimension in the design of the district.

- La Butte rouge in Chatenay Malabry (1930-47, 53 ; André Riouss Landscape architect)
- L’Aubépin in Chalon sur Saône (1954-58; Henri Pasquier, Landscape architect)
- La Maurelette in Marseille (1961-68 ; Jacques Sgard, Landscape architect),

These examples enable us to follow the transformation of the relationship between site and urban or landscape design, along 40 years of time. They represent steps in the way the question “how to deal with existing site and local characteristics?” is addressed by landscape architects in this period. They also show three major protagonists of the making of the profession, as this period is also that of the creation of the first training in Landscape architecture in France. An unrecognized generation of professionals of the time has indeed been trained at the section "du Paysage et de l’Art des Jardins", created in 1945 at the "Ecole Nationale d’Horticultrue de Versailles", which will be turned into the Ecole Nationale Supérieure du Paysage in 1975.

For each case, different aspects of the site dimension will be addressed. First, the operation will be understood within its larger historical context (1930-1970) : the public policies on social housing and the architectural theories. The program will also be mentioned as site data, as it defines the
Density of buildings through the number of dwellings per hectare. The site is described as concrete physical, topographical, geological and edaphic (soil as substrate) data, but also as wider area encompassing the land necessary for its geographical and urban understanding. Finally, the site will be meant as local cultural entity; in short, based on site data, initial projects and potentials of development of these districts will be addressed.

**CASE STUDY 1: THE BUTTE-ROUGE GARDEN-CITY DISTRICT, (1930-1965)**

De Rutté, Bassompierre, Sirvin, architects; Riousse, landscape-architect.
Chatenay Malabry, 12km south of Paris

**First steps in Public Housing policy, Interwar continuity**

It is one of the biggest and better-known interwar social mass-housing developments in Greater Paris. It is located on a beautiful site, partly covered by a forest and the park of a mansion, and edged to the north by a national road.

Although the construction of its 3600 collective dwellings lasted for almost 40 years, the final layout remained rather faithful to the early drafts, and to the idea of implementing a firmly modern district in a luxuriant sloping landscape. The pink stucco, yet not the original one, and the permanence of materials and details contribute to unify the neighborhood throughout the wide time span. It is still today a neighborhood renowned for the quality of its architecture and landscape design, emblematic of the modernity in France, although being an enclave wedged between forest (now crossed by the highway) and road, inhabited by a disadvantaged population.

The neighborhood illustrates the beginning of the public social housing policy in France, under the influence of Henri Sellier. It is inspired by the English garden-city movement. The district is one of the 15 garden cities commissioned by Henri Sellier in the interwar, in order to fight against both urban sprawl and unhealthy housing of the city center.

According to this commissioner "the conception of the garden-city must be ruled by nature and ground accidents [in order] to maintain the attractiveness of the site and to preserve plantations". The site is divided in two parts, a plateau and a valley. On the first one, the preservation of the existing trees is sought, while the lower part is "built in a way that each house is placed according to the slope in order to assure the maximum of view and sun".

At the territory scale, the arrangement of the garden-city is founded on the natural elements. The relief is strongly marked: the plateau in a shape of spur oversees the valley furrowed by thalwegs and croups with strong slopes, joining on the trace of a former stream.

The system of paths and roads is inscribed in the topography. A longitudinal east-west pedestrian axis, implemented perpendicularly to the slope runs through the site and the major public spaces. Both extremities are occupied by higher buildings, on stilts. This axis enables to integrate the views on the landscape. The district is organized in units linked to the main avenue by streets that generate squares, punctuated by towers signaling the entrances, emerging above the 2 or 3-storey horizontal buildings.

At the intersection of these longitudinal and transversal axes, we find the public squares: at the lowest points, Jean Allemane and François Simiand squares designed by Riousse; on the western hill, the "half-moon" building, and its belvedere that looks towards the other side, surmounted by the Leon Blum square and its building on stilts.

Water is an important element. The former canalized stream guides the implementation of the streets. The sinuous geometry enables picturesque effects that break the monotony of the repetitive architecture. The presence of water is reminded by the arrangement of fountains and ponds in the main public spaces.

The long-lasting time conception of this district enabled the development of several concepts of urbanism and site notion, from the "urban art", inspired by Camillo Sitte to the Athens Charter. The district consists of seven units, with different densities, with their own facilities and public spaces. Each of them embodies the values of its time and is struggling today, like many modern areas, to adapt to contemporary lifestyles.
We selected, for a deepen study, three of these units, belonging to different periods (1930, 1948, 1955) and particularly representative of the questions addressed by their inscription in the site (in particular the isolation) and the potentials they represent.

1.1- LA BUTTE ROUGE- FIRST STAGE UNIT (1930-1933)
1034 dwellings on 14.3 ha (72 dwelling/ha):

*The site as major component of the project*

This area shows the transition between the urban and the natural sides of the "valley". It was the first part to be built, the foundation of the later development. It is also one of the most important sequence and the place where patrimonial and functional aspects mostly oppose.

The Albert Thomas street is the first and main entrance to the district. The roads are implemented in a way to limit the ground movements, (they certainly have been realized with few machines.) On one side, a platform is created to set the buildings, on the other side, the building, underlined by a gallery, is used as a retaining wall. This sector is ruled by "urban art": asymmetry and alternate rows of buildings. The attention of the designers is focused on the entrances, canopies and stair windows of the building, while the rest remains extremely simple.

The work of the landscape-architect also consisted in planting the slopes in front of the buildings and in the interval, with pine trees, giving the aspect of an open and clean city.

The place François Simiand was arranged by the landscape-architect in order to preserve several existing oaks proceeding from the forest. The design allies neo-classical grass surfaces and pavement with a lake. The work on the difference of level led to a simple stone treatment, retaining wall and bench at the same time.

Today, the square is rather deteriorated. It is not much used except by the children who skate and ride bikes in the empty pond.

On the right corner of the square begins the street Robert Hertz, whose buildings, located asymmetrically, are linked by wooden trellised walls sparing effects of transparency and surprise. The road following the old stream is placed in a deep thalweg. Today, this place faces serious problems related to its isolation and moisture from the soil and numerous trees.

1.2- LA BUTTE ROUGE- THIRD STAGE UNIT (1946-1948)
591 dwellings on 7.7 ha (76 dwellings/ha)

*Doing with what is there, the site “as found”, diversity and pragmatism*

For the "plateau" area, the first layout established in the 1930s foresaw "groups of dwellings making private closes with green for the children games. The part of the former park is planned to preserve the secular trees". After the war, the plan, a serial of regular closes, is adapted to the existing trees and to the rising demand of parking lots. The architect Sirvin seeks to extend the ideas developed in the interwar from models to the reality of the site. The streets network is operating in closed circuit and does not contribute to the opening of the neighborhood. The design of a more homogeneous open space is also beginning to emerge.

The landscape-architect André Riousse (1895-1952), still contributed at this stage. A sensitive work of bases made of the same stone as the place F. Simand, enables to keep some existing trees in the new leveling.

These collective spaces finely linked to the specificities of the place constitute a major asset for better quality of life and local atmosphere whose managers do not always seem to take into account or cannot afford to improve.

1.3- LA BUTTE ROUGE- FIFTH STAGE UNIT (1952-1955)
400 dwellings on 7, 6 ha (52 dwellings/ha)

*The supremacy of the “open order”, or loss of expertise?*
This stage shows more independence from the existing site than the previous ones. Initially, this area was occupied by garden lots. The first layout of the 1930s shows a system of small squares, with low density housing. In the 1950s, the scheme has to be adapted to the existing topography, a convex croup more sloppy than imagined first. The area is limited by the forest and a former path. The traces of the streets follow the ground accidents and the buildings are implemented with few relations to the streets, according to a north-south orientation that opens a view towards the edge.

The square Leon Blum is implemented on a flat terraced ground. The important earth-work was probably possible thanks to the (new) mechanization. The context of the Reconstruction, influenced by the Athens Charter, imposed here: The disconnection between the public spaces and the buildings produces no quality, no space of sociability, apart from a quite classical small garden at the bottom of the building on stilts edging the main axis (JC. St-Maurice, landscape consultant)

Today, the area suffers from a lack of articulation with the rest of the district. Consequently, the complete overhaul of the urban layout becomes necessary, but on what basis? The soil entirely remodeled in 1950s constitutes the permanent element for future development. The systematic establishment of buildings, which creates no hierarchy, should probably be changed to give new meaning to the space.

A tram line, scheduled for 2015, will open up the Butte Rouge district and enable it to escape relegation. But this change casts doubts on the preservation of this heritage; the area becoming more attractive for intensification and diversification of the habitat or the privatization of the collective land.

CASE STUDY 2 : THE AUBÉPINS DISTRICT (1952-61)

Jerrold, Fournier, architects; H. Pasquier landscape architect
Chalon sur Saône. Bourgogne (Burgundy)
1500 dwellings on 23 ha (691gts /Ha) :

Reconstruction and experimentations: The site as found, diversity and pragmatism

The district is located on a plateau overlooking the river Saône, in the outskirts of the city of Chalon. The site is essentially flat apart some micro-topographical elements. Simple but good quality buildings surround a huge and indented central park. The desire to create a green space is in line with the development policy developed in the north of the city. This is one of the first times that an operation of social housing associated a landscape architect; he will contribute to launching the first green department in a Public Housing Office.

Public housing policies remain in this period following the war, very hesitant. The Aubépin is part of a State experimentation called "Le Secteur Industrialisé" which focused on technical innovation in the field of prefabrication and on organization of housing unit. We are far from the landscape that is nevertheless very present here.

The architects then usually follow the requirements of the Charter of Athens on master plan: parallel blocks subject to the sun direction according to the rules of "open order" sometimes associated to prior knowledge.

"In the midst of an ungrateful landscape bordered to the west by smokestacks and surrounded on all sides by buildings with the most diverse styles built at random, it seemed necessary to create a reserve of oxygen, together with an attractive public garden where would be arranged large spaces for games and sports." The district includes some private housing estates corresponding to properties that could not be acquired. The site is also crossed by two main roads that intersect in 3 parts. In an initial field of 30 ha, only 23 were available for construction and included a 11 ha park. In the end, 20 ha were devoted to green open spaces.

A first project presents a mix program of individuals housing units (for large families) and collective units, whose two thirds are developed in two large curved bar with 10 storeys along the factories which have to be hidden. The central park is much less generous than in the final project (made only of collective units) divided into two types of bars located at the limits of the area. The buildings are either long and low, five levels on the more urban side, or short and high, 12 levels on the west side "where the factories landscape in the foreground warranted a vertical conception offering great points of views."

The landscape architect Henri Pasquier (1909-1993) was convinced of the important role that landscapers have to play in this type of program, and saw the general indifference to the issue of open
space as an asset that enables him to work well. In order to face this new scale of intervention, the landscape architect resorted to forestry techniques to guarantee the quality of the planting, its durability and maximum growth.

"The approach adopted was the simplest. It is, in short, a free landscaping, sticky to the ground and alternating large sunny lawns and areas of afforestation”

External planted malls sometimes double (poplar and lime), surround the operation, manage the relationship with the limits and include parking and bowls. Realized with great generosity, these passageways orchestrate the articulation between the districts with their environment. The centre is completely free of traffic. "Tunnels were created to allow footpath between the three areas without ever being forced to cross the street.”

The clayish ground is a former tile fabric in which the excavations were transformed in ponds. “On this soil, the thin organic layer was carefully tucked. The few existing trees, willows and white poplars, have been integrated. Forestry techniques have been developed: massive planting of three years seedlings and strands of 1.50 m, with few 16x18 ornamental stems in a way to install and strengthen the planting. The three largest excavation holes were preserved because they were holding the water naturally. Their cleaned and planted edges are still frequented by many fishermen because these ponds are stocked with fish. On the large pond in the southern zone, a beach has been created for children and their mothers. Many playgrounds have also been created: 7 kindergartens on one hand and two large mesh lands of 3000 m² for ball games on the other.” The two pieces of water in the northern part were originally connected by a stream. Due to pollution, the stream as one of the water piece has been filled up. The project uses local materials: sand, gravel and pebbles from the local French region Bourgogne.(Burgundy). Today, new games such as high ball game cages have been installed there and encroach on the clearings.

The vegetal devices are divided on many types of sliding effects and successive filters, in addition to lateral views made by the parallel blocks. A key element of the project's success is its long-term thinking in particular through the establishment of forestry techniques for the wooded part of the park, the protection of forest plants by hedges and fences, plantation of white clover to enrich the soil, and the creation of a green space department depending on the HLM (council flats) office for the management of the outdoor spaces of the district. In response to a land unfit for cultivation, site constraints are used as asset: control of planting techniques such as ponds recovery, or the initial excavation to cross under the tracks and preserve the unity of the living space. Similarly today, residential enclaves initially criticized contribute to a positive diversity and facilitate the connection with its environment. (Somehow, we come back to the individual units forecast in the first project).

All the components of these relations, between levels, plants and buildings can be identified on a section through the project and its environment....

Today, the Council Housing Office has refused the demolition project proposed by the ANRU, the ongoing consultation, however focuses exclusively on the buildings rehabilitation.

CASE STUDY 3 : LA MAURELETTE NEIGHBOURHOOD UNIT (1961-1968)
Chirié père et fils, architects, Jacques Sgard, Landscape architect
North of Marseilles, Provence, 750 units on 12 ha (62 dwellings per ha)

Public housing critics : Return to urban continuity, permanence of the landscape vision

La Maurelette neighbourhood Unit was developed on a former Provencal country house estate by Eugène Chirié and his pro-active regionalist sons, who were from the outset associated with the landscape architect Jacques Sgard and the artist Bernard Lassus pour le “conseil d’ambiance visuelle” (Environmental moods and colours). It reflects the search for alternatives solutions from standard mass-housing developments.

The operation is based on a pluri-disciplinary approach integrating the notion of lifestyle. It was a time of contradictions: while production increased, a number of concerns began to emerge. The local commissioning authorities intended the project to be a model of development, bringing together many actors from the beginning of the project: the contractor, the contracting authority, doctors, social workers and local authorities.

The success of the Maurelette is the result not only of in-depth technical studies, of the coordination of all stakeholders in the smallest details, but also of a desire to fit into the site. It is also
the consecration of a team work (...) under the facilitation of a client particularly involved (...) Then comes the customization of each building, each yard, the harmony of colours, the successful integration of the old mansion, the perceptions towards the Marseillais landscape."

The land is steep, with a differential of 15 meters, offering views on the port and hills of Marseilles. The site's design integrates the old Provencal country house as cultural centre and preserves the existing flora: an alley lined with plane trees, a small wood composed of evergreen oaks, and a copse of cedar trees. "This allée lined with plane trees was sacred. It was the epitome of the Marseillais landscape."

On the west a motorway isolates part of the site. On the east the site borders the old village of Saint Joseph. The master plan gives preference to pedestrians and translates the notion of spatial continuity inherited from the ideas of Team Ten, in the context of the Athens Charter critics.

The first propositions which developed 800 housing units in parallel bars, give way to projects based on “volume in negative”: 750 housing units distributed around collective places. The 4-and 10-storeys buildings inserted into the slope and the five 16-storeys towers that articulate them, are distributed around small stone-paved squares built above underground garages. The absence of excavation should protect the local underground water network.

The structures reflect local architectural forms, which respond to the Mediterranean climate: protection against the mistral wind and excessive sunshine, patios, loggias and passages, giving an important credit to the “cultural aspects” of the site. The main activities, bowls and contemplative relaxation, are practised on the terraced balcony that overlooks the landscape.

Together the landscape architect J. Sgard and the artist B. Lassus roamed the surrounding countryside to observe local materials, colours, and atmospheres. For the complex façades, Lassus created a subtle composition of blues, yellows, and greens that play against the sky and with the plants and soil. The covering of coloured glass tiles constitutes an essential component in defining the spaces of the La Maurelette district.

The small squares still remain close to their initial states: The Place du Cadran, paved and planted, has slightly changed — initially a paddling pool, this section surrounded by pebbles was transformed into a planted area, like all water pieces in response to complaints of excessive noise from the children. The Place du Commerce, which had been initially planned as a link to the old village, has now become a loitering place for youths and outcasts due to the closing of the shopping centre. The situation would be today different if the inscription of this commercial centre in a larger territory would have been developed to the end. Some parts appear today in a bad state, this is the case for the squares distant from Saint Joseph area: the Place Baussane seems to be undergoing a “boarding-up” process with fenced-off loggias, curtains, desertion of public areas.

The Logecil Company recently evicted after 40 years of management, worked to preserve the glass facades and to maintain the green spaces. Unfortunately, the glass tiling on the gable walls has already been replaced by a simple coating of mineral painting.

Compared to other housing complexes of the same type in Marseilles, La Maurelette is relatively well positioned without any major problems of delinquency or degradation, as more than 50% of its occupants (in 2004 65%) own their units. La Maurelette future is uncertain; the consequences of the new management will take time to be appreciated, certainly too late to prevent negative effects.

CONCLUSION

With these few examples we have tried to show how the inscription in the site, contrary to preconceived notions, is present in the design of modern housing areas, both at the territorial level as that of the district or detail levels. The different forms of relationships involved between these spaces and their site data seem to represent key potentials to enhance this heritage and adapt it to current urban issues.

The elements, on which could be built a new contemporary stratum are of two main types: first, those linking the project to its environment and entering it in a larger scale, urban and territorial. On the other all figures that solve the project at the local level. These figures refer to three registers respectively:
structures and vegetal filters, the game between buildings and finally the management of levelling. Landscape is appreciated when crossing the different levels and passages, it challenges the project's ability to engage a dialogue with the ground, the buildings and with its boundaries. This approach is particularly useful to appreciate the landscapers' work, if we remember that it takes 50 years to the plants to produce their full effects.

The upcoming projects - the currents and the futures - constitute one more stratum, in the history of the district that we have described and highlighted the successive steps. The historical approach constitutes not only a way to reconstruct knowledge, but also a strong opportunity to understand current issues.

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i ANRU, Agence Nationale pour la Renovation Urbaine (National agency for Urban renewal) was created in 2003 and strengthened after the 2005 riots. It has identified 530 areas to be renovated by 2013, thanks to public-private partnerships that have been able to fund more than 40 billion euros of work. (www.anru.fr)

ii Blanchon B. (Larep), Delbaere D (Lacth), Garleff J. (Leav), Le paysage dans les ensembles urbains, 1940-1980, 2010, DAPA-ENSP.

iii All the quotations of Henri Sellier are extracted from SELLIER, H. (1998), Une cité pour tous. Paris: éditions du linteau. Description of the project : Archives municipales de Châtenay-Malabry, 1923 ; Archives privées Sirvin, architecte.


v Fonds Chirié, Archives départementales des Bouches du Rhône (AD13)

vi In this approach, we refer to Alain Leveillé’s works (1997) for the development of an Atlas of Geneva territory.