

Analysis of the Renovation of French Public Housing Complex— DSQ (Développement Social des Quartiers)

By
Ryoko OYA

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This paper focuses on the fact that in the public housing (Habitation à Loyers Modérés) in France, houses are nowadays not always renovated one by one, but are renovated as a total complex. This type of renovation is called DSQ (Développement Social des Quartiers), a total renovation scheme of a public housing complex. The targeting of the whole complex and its area for renovation requires the participation of as many as twelve ministries. This program found its origin in the program HVS (Habitat et Vie Sociale), which mainly involved the renovation of the housing while DSQ also focuses on the infra structure, landscape of the housing complex, social facilities, and social activities that are taking place in the community.

While the DSQ program started in 1984, this paper will focus on the current second phase that started in 1989 and is expected to end in 1993. During this second phase, tight cooperation with local authorities allows various projects in the vicinity of the housing complex to be done.

1. Introduction

A large proportion of dwellings in France belong to the public rented sector, known as HLM (Habitation à Loyers Modérés). The public rented sector topped three million in 1988; this is 15% of the total number of dwellings. Therefore there has been an accumulation of remarkable practices in terms of the housing management and housing renovation process.

From 1977, the French government decided to shift their support towards personal subsidies in the form of housing benefit from bricks and mortar subsidies. The aim was to put importance on the renovation rather than the construction of housing. This shift brought into practice the contents of the Barre report that was published by the national commission and involved a study on financial reform in housing.

The new housing policy was the result of a national survey that showed that 6.7 millions of dwellings, almost equal to one quarter of the total dwellings did not satisfy the three comfort elements: inner toilet, bath, and central-heating, defined by INSEE (Institut National de la Statistique et des Etudes Economiques).

In France, there had already been a Housing Rehabilitation Act in 1967. As far as

housing renovation is concerned, 1977 is considered the starting year. This is explained by two reasons. The first reason is the fact that government founded the rehabilitation grant in whole tenures of owner-occupied, private rented, public rented, HLM, as PAH (Prime à L'Amélioration d'Habitat), ANAH (a grant from Agence Nationale pour l'Amélioration d'Habitat), PALULOS (Prime à l'Amélioration des Logements Usages Locatif et à Occupation Sociale). Secondly, the institutional launching of an improvement scheme for the residential environment to accelerate and deal with mass rehabilitation. For built-up areas OPAH (Operation Programmées d'Amélioration de l'Habitat) was launched and for the HLM complex, HVS (Habitat et Vie Sociale) was setup. The HLM complex renovation scheme, on which we are going to focus this paper, has its anniversary in the prolongation of this scheme HVS.

Nowadays, DSQ already has eight years of experience. This study aims to evaluate the roles of the HLM complex renovation scheme: DSQ in an eight year time span, taking into account the DSQ second stage (1989-1993), after the institutional revision, which draws the inspiration from the same principles under the DIV (Délégation Interministérielle à la Ville et au Développement Social Urbain), but enables various developments in application answering to the local particular requests.

2. The Framework of the DSQ

HVS could have been continued as a means for housing rehabilitation and it could have given satisfactory numerical results. Instead, the former HVS evolved into DSQ and in addition to the housing rehabilitation it now incorporates the operational poles: area improvement and social activities under the name of accompanied actions. These changes have to do with a series of social incidents called "étés chauds" that occurred in HLM complexes in the outskirts of big cities where the vandalism was at its peak and the decline of the whole community of HLM complexes.

After the implementation of an ad hoc operation in 1982, the first stage was set up in 1984. The first stage designated 148 districts in 18 regions. In a five year period of operation, 160,000 out of 350,000 dwellings will have been rehabilitated. The total budget is 11,963.61 million FF; 8,965.39 million FF for the housing rehabilitation and 2,998.22 million FF for accompanied activities. Within the budget for accompanied activities, two thirds is reserved for non-housing improvement and one third is for social activities. This shows that even after the reorganization into a total renovation scheme, the importance is still put into housing rehabilitation.

Before going into the details of the operation of the DSQ, we will give here a summary. DSQ reinforces the characteristics of HVS but is more ambitious in policy and establishes clear-cut lines throughout the institutional revision process:

1) National solidarity

Implementation of commissions at each administrative level: national, regional, and

local governmental level. Contractual policy concentrates in the first place on a contract between state and region and, secondly, on the contract between state, region, and local government.

2) Leadership of the local government as an operating body

The central government authorized the local government for the city planning regulation in 1983 and for city planning operation in 1985.

3) Development toward the total renovation scheme

DSQ is a wide-ranging project composed of physical and social planning. Therefore there is interaction between no less than 11 ministries.

4) Partnership

Cooperation also becomes clear at the local level where they execute the operation. Councilors, state officials, trade unions, public housing authority, local government services, social workers and associative movements assemble in one place at the local commission which transmit their policy and decisions to the district operational team, "Equipe Opérationnelle".

3. Housing Rehabilitation

Dwellings are improved with the help of a bricks and mortar subsidy to the HLM public rented sector. This subsidy is called PALULOS (Prime à L'Amélioration des Logements à Usage Locatif et à Occupation Sociale). After receiving the PALULOS, dwellings automatically



Fig. 1. HLM Housing Complex Choisy-Orly.

become subject to contractual obligations. In principle the dwellings are required to satisfy the national minimum standard in housing accommodation, NMH (Norme Minimal d'Habitabilité). This section focuses on the results of the rehabilitation operation of

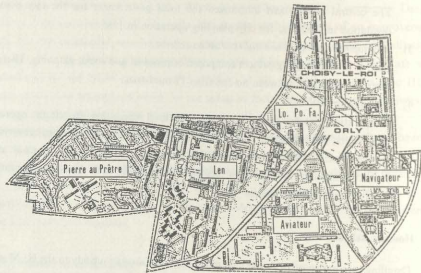


Fig. 2. Plan of Housing Complex Choisy-Orly.

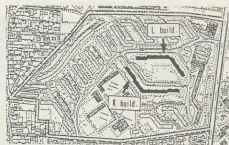


Fig. 3. Plan of Pierre au Prêtre.

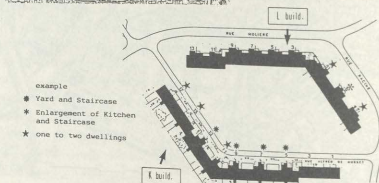


Fig. 4. Remodeling in Build. K, Build. L.

dwellings, including the accomplishments of NMH. We take as a case study example, the HLM housing complex that belongs to the housing authority of OPAC de Marne-de-Varne in the region of Ile-de-France, Choisy-Orly. This complex was constructed during 5 years from 1958 to 1963. The complex consists of 5,392 dwellings. The 18,850 inhabitants consist of 58% of citizens from Orly city and 8% from Choisy-le-Roi city.

Here we will analyze the rehabilitation scheme. This analysis will include a breakdown

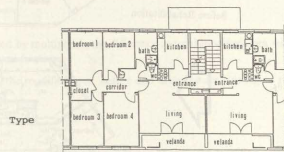


Fig. 5. Case I.
Non-Remodeling Type.



After Rehabilitation

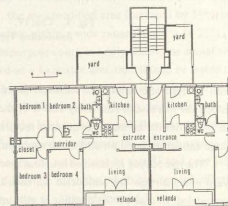


Fig. 6. Case II.
Remodeling Type (Yard and Staircase).



After Rehabilitation

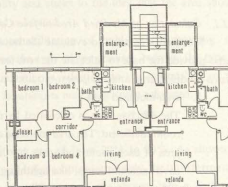


Fig. 7. Case III.
Remodeling Type (Kitchen and Staircase).

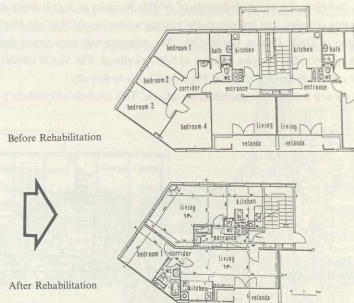


Fig. 8. Case IV.
Remodeling Type (one to two dwellings).

into the type of dwelling, the variation of remodeling, and the increase in modified area that effects the increase in rent. Only 12.5% of the dwellings have been remodeled. The difference in area from the minimum living area required SHM (Surfaces Habitables Minimales) is not large enough to build an additional room on purpose.

The remodeling is classified into four cases. In case I, no remodeling is done. In case II the yard and staircase are remodeled. In case III the kitchen is enlarged and the staircase is remodeled. In case IV the dwelling is split into two. Eighty dwellings are classified not to be remodeled (case I). The other 561 dwellings belong to either case II, case III, or case IV.

3.1 Calculation of Modified Area-surface Corrigée

Modified area aims to evaluate the housing accommodation standard of each dwelling and provide the base to calculate the rent for the HLM. The modified area is the sum of the *area-modified area* and *equipment-modified area*.

A. *area-modified area*

The effective area is calculated by multiplying the actual area of each room by its room coefficient. The *area-modified area* is then calculated by multiplying the effective area of each room and space by the coefficient according to the sufficiency of the environmental items, like lightning, sunshine, and sight.

B. *equipment-modified area*

Each item, such as toilet, shower, etc., is assigned a number of points per unit. The *equipment-modified area* is calculated by multiplying the number of points per unit by the number of units per item and summing over all items.

C. total modified area

The total modified area is the sum of the *area-modified area* and the *equipment-modified area*.

3.2. Increase in Rent

The increase in rent is calculated by multiplying the difference in total modified area with the cost per m^2 .

We will analyze the change of the modified area, before and after the remodeling of the dwellings.

3.3 Area-modified Area

In case I, which does not have any remodeling, the increase of the *area-modified area* is limited to 5%. This increase in area is caused by the inclusion of the verandah. In case II and case III, where the dwellings were remodeled, the *area-modified area* increased by 19% and 20% respectively. So, *area-modified area* increases within a wide range from 5% to 20%.

In case II, because a yard, an outside multipurpose court, is newly added, the actual area increases to $11.07 m^2$. This area is not regarded as a habitable area that should be inside the dwelling, although it is enclosed by the wall. Therefore, the area is multiplied with a coefficient 0.6 instead of the usual 1.0 that is the case of habitable space. Using this coefficient the effective area is reduced to $6.64 m^2$. In case III, the kitchen is enlarged. Because the kitchen remains part of the habitable space, the coefficient used to calculate the effective area is 1.0. As a result, the effective area is $8.00 m^2$. Although the actual area in case II and case III is $11.07 m^2$ and $8.00 m^2$ respectively, a $4.07 m^2$ difference, after the rehabilitation, the effective area becomes $6.64 m^2$ and $8.04 m^2$ respectively, only a $1.38 m^2$ difference.

Case II tries to increase the area as much as possible without consideration for habitability. Case III puts the priority on the habitability and sticks to the idea that the area should be part of a room. As a result, the area added is limited.

Although the renovation concerns the rehabilitation of public social housing, the inhabitant is allowed to make the selection on the type of remodeling, because the type of remodeling directly influences the increase in rent. In addition as the remodeling of the staircase must be done for a whole building, inhabitants may have to be relocated.

3.4. Equipment-modified Area

The increases in the *equipment-modified area* are all from 20% to 30%. As shown in the modified area table, the items that are newly added are, hot water supply, the transformation from shower to bath, and TV Antenna. The modification of the shower into a bath was

Table 1. Area-modified Area in Case of Non-remodelling.

	Before rehabilitation										After rehabilitation										
	Actual Room Effec.					Environmental coef.					Actual Room Effec.					Environmental coef.					
	area	coef.	area	coef.	area	Light	Sun	Sight	Avg. coef.	area	coef.	area	coef.	area	Light	Sun	Sight	Avg. coef.	area	coef.	area
1	Kitchen	5.00	1.00	5.00	1.00	0.60	0.90	0.93	4.17	5.00	0.90	4.50	1.00	0.80	1.00	0.93	1.00	0.93	4.20	0.03	
2	Dining	14.00	1.00	14.00	1.00	0.80	1.00	0.97	13.53	14.00	1.00	14.00	1.00	0.90	1.00	0.90	1.00	0.90	13.53	0.00	
3	Bedroom1	11.00	1.00	11.00	1.00	0.90	1.00	0.97	10.63	11.00	1.00	11.00	1.00	0.90	1.00	0.90	1.00	0.97	10.63	0.00	
4	Bedroom2	9.00	1.00	9.00	1.00	0.90	1.00	0.97	8.70	9.00	1.00	9.00	1.00	0.90	1.00	0.90	1.00	0.97	8.70	0.00	
5	Bedroom3																				
6	Bedroom4																				
7	Washbasin	4.00	1.00	4.00					4.00	4.00	1.00	4.00							4.00	0.00	
8	Close1	2.00	0.60	1.20					1.20	2.00	0.60	1.20							1.20	0.00	
9	Close2	2.00	0.60	1.20					1.20	2.00	0.60	1.20							1.20	0.00	
10	Corridor	3.00	0.60	1.80					1.80	3.00	0.60	1.80							1.80	0.00	
11	Yard																				
12	Entrance	5.00	0.60	3.00					3.00	5.00	0.60	3.00							3.00	0.00	
13	Veranda																				
Total		55.00		50.60					48.63	50.00		52.50							51.07	2.43	

Analysis of the Renovation of French Public Housing Complex DSQ

Table 2. Area-modified Area in Case of Remodelling of Yard and Staircase.

	Before rehabilitation										After rehabilitation										
	Actual Room Effec.					Environmental coef.					Actual Room Effec.					Environmental coef.					
	area	coef.	area	coef.	area	Light	Sun	Sight	Avg. coef.	area	coef.	area	coef.	area	Light	Sun	Sight	Avg. coef.	area	coef.	area
1	Kitchen	7.00	1.00	7.00	1.00	0.60	0.90	0.93	5.83	6.44	1.00	6.44	0.60	0.60	1.00	0.73	4.72	1.00	0.73	4.72	-1.11
2	Dining	15.00	1.00	15.00	1.00	0.90	1.00	0.97	14.50	18.30	1.00	18.30	1.00	0.90	1.00	0.90	1.00	0.97	17.69	3.19	
3	Bedroom1	12.00	1.00	12.00	1.00	1.00	1.00	1.00	12.00	9.42	1.00	9.42	1.00	1.00	1.00	1.00	1.00	1.00	9.42	-2.58	
4	Bedroom2	9.00	1.00	9.00	1.00	1.00	1.00	1.00	9.00	9.47	1.00	9.47	1.00	0.60	1.00	0.87	8.21	1.00	0.87	8.21	-0.79
5	Bedroom3	9.00	1.00	9.00	1.00	0.60	1.00	0.87	7.80	11.46	1.00	11.46	1.00	0.60	1.00	0.87	9.93	2.13			
6	Bedroom4	8.00	0.90	7.20	1.00	0.60	1.00	0.87	6.24	8.08	0.90	7.27	1.00	1.00	1.00	1.00	1.00	7.27	1.03		
7	Washbasin	4.00	1.00	4.00					4.00	4.55	1.00	4.55							4.55	0.55	
8	Close1	2.00	0.60	1.20					1.20	2.76	0.60	1.36							1.36	0.16	
9	Close2	1.00	0.60	0.60					0.60	1.00	1.00	1.00							1.00	0.00	
10	Toilet	1.00	1.00	1.00					1.00	0.72	0.60	0.60							0.60	-0.40	
11	Corridor	3.00	0.60	1.80					1.80	11.07	0.60	6.64							6.64	6.64	
12	Entrance	6.00	0.60	3.60					3.60	2.76	0.60	1.66							1.66	-1.94	
13	Veranda									5.83	0.60	3.50							3.50	3.50	
Total		79.00		72.60					68.77	100.36		86.90							81.78	13.00	

Table 3. Area-modified Area in Case of Remodeling of Kitchen and staircase

	After rehabilitation										Difference										
	Before rehabilitation					After rehabilitation															
	Actual Room area	Effec. area	Enviro. coef.	Avg. Mod. coef.	Mod. area	Actual Room area	Effec. area	Enviro. coef.	Avg. Mod. coef.	Mod. area											
			Light	Sun	Sight	Light	Sun	Sight													
1 Kitchen	6.00	1.00	6.00	1.00	0.60	0.90	0.60	0.90	0.83	5.00	14.00	1.00	14.00	1.00	14.00	0.80	1.00	0.93	13.07	8.07	
2 Dining	15.00	1.00	15.00	1.00	0.80	1.00	0.80	1.00	0.87	14.50	1.00	14.50	1.00	14.50	1.00	14.50	1.00	1.00	14.50	0.00	
3 Bedroom1	11.00	1.00	11.00	1.00	1.00	1.00	1.00	1.00	1.00	11.00	1.00	11.00	1.00	11.00	1.00	11.00	1.00	1.00	11.00	0.00	
4 Bedroom2	9.00	1.00	9.00	1.00	1.00	1.00	1.00	1.00	1.00	9.00	1.00	9.00	1.00	9.00	1.00	9.00	1.00	1.00	9.00	0.00	
5 Bedroom3	8.00	1.00	9.00	1.00	0.87	1.00	0.87	1.00	0.87	7.80	1.00	8.80	1.00	9.80	1.00	10.80	1.00	0.93	8.40	0.60	
6 Bedroom4	8.00	0.90	7.20	1.00	0.60	1.00	0.60	1.00	0.60	6.24	8.00	0.90	7.20	1.00	0.80	1.00	0.80	1.00	0.93	6.72	0.48
7 Washbasin	4.00	1.00	4.00							4.00	4.00	1.00	4.00						4.00	0.00	
8 Closet	2.00	0.60	1.20							1.20	2.00	0.60	1.20						1.20	0.00	
9 Toilet	1.00	1.00	1.00							0.60	1.00	1.00	1.00						1.00	-0.60	
10 Corridor	1.00	1.00	1.00							3.00	5.00	0.60	3.00						3.00	0.00	
11 Yard	5.00	0.60	3.00							3.60	6.00	0.60	3.60						4.80	0.00	
12 Entrance	6.00	0.60	3.60							3.60	6.00	0.60	3.60						4.80	1.20	
13 Veranda											6.00	0.60	3.60						3.60	3.60	
Total	77.00		70.60							66.94	92.00		82.80						80.29	13.35	

Table 4. Equipment-modified Area in Case of Non-remodeling.

Equipment	Before rehabilitation			After rehabilitation			Difference
	Units	Points/unit	Total points	Units	Points/unit	Total points	
Cold							
1 Kitchen	1	3.50	3.50	1	3.50	3.50	0.00
2 Bath	1	0.50	0.50	1	0.50	0.50	0.00
3 Washbasin	1	0.40	0.40	1	0.40	0.40	0.00
4 Bidet							
Warm							
5 Kitchen				1	1.00	1.00	1.00
6 Bath				1	6.00	6.00	6.00
7 Washbasin				1	0.50	0.50	0.50
8 Bidet							
9 Toilet	1	6.00	6.00	1	6.00	6.00	0.00
10 Bath				1	4.00	4.00	4.00
11 Shower	1	2.00	2.00				-2.00
12 Washbasin	1	1.00	1.00	1	1.00	1.00	0.00
13 Bidet							
14 Central heating	5	3.00	15.00	5	3.00	15.00	0.00
15 Electricity	1	2.50	2.50	1	2.50	2.50	0.00
16 Gas	1	1.50	1.50	1	1.50	1.50	0.00
17 Trash chute	1	4.00	4.00	1	4.00	4.00	0.00
18 Elevator							
19 TV antenna				1	1.00	1.00	1.00
20 Storage	1	1.00	1.00	1	1.00	1.00	0.00
Total			37.40			47.90	10.50

necessary to meet the requirements of NMH. The hot water supplies already existed, but were individually installed. A collective TV antenna is an item that also has become indispensable because of the popularization of TV.

All the twenty items have been listed on the assumption that the dwellings should satisfy these sooner or later. After the rehabilitation, all the required items have been furnished, except for the elevator and bidet. As this block of Pierre au Pretre doesn't include buildings of more than five stories, there is no need to satisfy the elevator requirement anyway. From the observation of the modified area table, we can conclude that the rehabilitation was aimed at achieving the fundamental equipment standard which comprises twenty items, including the requirement of NMH.

All the work mentioned above belongs theoretically to the so called large repair. In France, rehabilitation is originally defined as the work that includes the idea of large repair

Table 5. *Equipment-modified Area in Case of Remodeling of Yard and Staircase.*

Equipment	Before rehabilitation			After rehabilitation			Difference
	Units	Points/unit	Total points	Units	Points/unit	Total points	
Cold							
1 Kitchen	1	3.50	3.50	1	3.50	3.50	0.00
2 Bath	1	0.50	0.50	1	0.50	0.50	0.00
3 Washbasin	2	0.40	0.80	2	0.40	0.80	0.00
4 Bidet							
Warm							
5 Kitchen				1	1.00	1.00	1.00
6 Bath				1	6.00	6.00	6.00
7 Washbasin				2	0.50	1.00	1.00
8 Bidet							
9 Toilet	1	6.00	6.00	1	6.00	6.00	0.00
10 Bath				1	4.00	4.00	4.00
11 Shower	1	2.00	2.00				-2.00
12 Washbasin	2	1.00	2.00	2	1.00	2.00	0.00
13 Bidet							
14 Central heating	7	3.00	21.00	7	3.00	21.00	0.00
15 Electricity	1	2.50	2.50	1	2.50	2.50	0.00
16 Gas	1	1.50	1.50	1	1.50	1.50	0.00
17 Trash chute	1	4.00	4.00	1	4.00	4.00	0.00
18 Elevator							
19 TV antenna				1	1.00	1.00	1.00
20 Storage	1	1.00	1.00				-1.00
Total			44.80			54.80	10.00

and improvement or *amelioration*. Large repair is designated to satisfy the fundamental standard of living by recovering the former condition of the building, while the amelioration is to achieve the up-to-date standards by installing the new provision.

As far as the large repair is concerned, it is possible to evaluate the work by the modified area table, and according to the table the increase of the total modified area was from 15% to 20%. Regarding the amelioration, it is not possible to see what kind of work is going on only by the current system of modified area.

The average total increase in rent is 55%, of which the increase in total modified area is 24% and that of the cost per m² which comes from the improvement is 25%. This shows that in the rehabilitation in French social housing, the importance of the improvement is almost equivalent to that of the large repair. This all stems from the fact that in France some of the improvement has taken place in answer to the residential environment as well as the change

Table 6. *Equipment-modified Area in Case of Remodeling of Kitchen and Staircase.*

Equipment	Before rehabilitation			After rehabilitation			Difference
	Units	Points/unit	Total points	Units	Points/unit	Total points	
Cold							
1 Kitchen	1	3.50	3.50	1	3.50	3.50	0.00
2 Bath	1	0.50	0.50	1	0.50	0.50	0.00
3 Washbasin	2	0.40	0.80	2	0.40	0.80	0.00
4 Bidet							
Warm							
5 Kitchen				1	1.00	1.00	1.00
6 Bath				1	6.00	6.00	6.00
7 Washbasin				1	0.50	0.50	0.50
8 Bidet							
9 Toilet	1	6.00	6.00	1	6.00	6.00	0.00
10 Bath				1	4.00	4.00	4.00
11 Shower	1	2.00	2.00				-2.00
12 Washbasin	2	1.00	2.00	1	1.00	1.00	-1.00
13 Bidet							
14 Central heating	7	3.00	21.00	7	3.00	21.00	0.00
15 Electricity	1	2.50	2.50	1	2.50	2.50	0.00
16 Gas	1	1.50	1.50	1	1.50	1.50	0.00
17 Trash chute	1	4.00	4.00	1	4.00	4.00	0.00
18 Elevator							
19 TV antenna				1	1.00	1.00	1.00
20 Storage	1	1.00	1.00	1	1.00	1.00	0.00
Total			44.80			54.30	9.50

in dwelling conditions. For example, to confront a social problem like vandalism, the automatic door locking with a code number is one of the items which is judged to be indispensable.

4. Area Improvement

With DSQ, area improvement was launched as one of the ambitious poles of the housing rehabilitation operation together with social activities. The public housing, HLM, complexes of the fifties and sixties were born of a doctrine of modern architecture seeking after rationality. They inevitably resulted in revealing the defects of monotonous building disposition, low cost materials, low living conditions, lack of improvement of the exterior of dwellings. They also pose the problems of *cut off from the urban transportation network*, and *isolation*

from the built-up area, from the view point of city-planning.

Now DSQ plunges a scalpel into existing inorganic defects of the housing complex as mentioned above and steps forward to form a new total residential environment in which inhabitants can have a safe, relaxing life. Area improvement requires two thirds of the total budget available for both area improvement and social activities. The cost per square meter is incomparably lower than that of the housing rehabilitation. However, the total area to apply the area improvement within the housing complex is large enough to have a practical effect.

In order to analyze the area improvement, we first sum up the main improved items which are classified into four categories.

4.1 Parkings, Squares, and Open Spaces

During the first stage of DSQ from 1984 to 1988, the squares attached to each block were renovated. The renovation consisted of the creation of a core for each block and flow lines that enables inhabitants to transfer from block to block and from area to area. The rehabilitation program also implemented automobile restriction zones together with environmental improvements to provide an easy access and to ensure the safe usage of the squares.

The program of open spaces is based on two ideas: 1) to guarantee an open space from the viewpoint of disaster planning, 2) to ensure the installation of a pedestrian path concurrently with the improvement of the open space that used to be vacant land. The planners accepted the situation of two vast open spaces between the blocks that did not allow communication between them and then took advantage of this defect, the geographical character, and in reverse, planned those open spaces as conjunction areas.

4.2 Roads, etc.

Improvements were made to the pedestrian paths, block connection paths, motor roads, and roundabouts. The total length of the pedestrian path improved reaches up to 4.8 km along the arterial roads. It became a particularly important issue of safety for the inhabitants who cross from the *Len* block to the *Aviateur* block. The urban transportation system allows large through traffic come into the housing complex. To provide safety to the inhabitants, they installed a block-connecting path which starts from the south part of the *Naviateur* block and penetrates through the *Aviateur* block and the *Len* block and finally reaches into the eastern edge of the *Pierre au Prêtre* block. The series of the transfer is perfectly accomplished first by the prohibition of motor vehicles and secondly by the creation of a *woonerf*¹ which restrains the speed of the cars. We conclude that through the installation of a block-connecting path, badly known characteristics of the housing complex from its birth, *separation of the blocks*, and *isolation of the living sphere* have been largely improved.

As an example of the improvement of the motor road, we cite the work of Avenue de

¹ Woonerf is a Dutch word for an area which designates a residential area designed to slow down traffic.

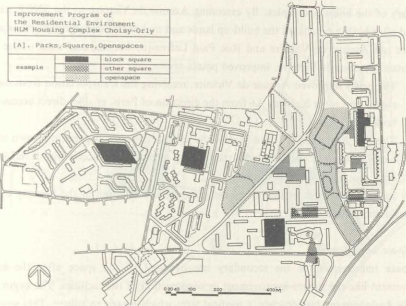


Fig. 9. Improvement Program of the Residential Environment [Parks, Squares, Openspaces].

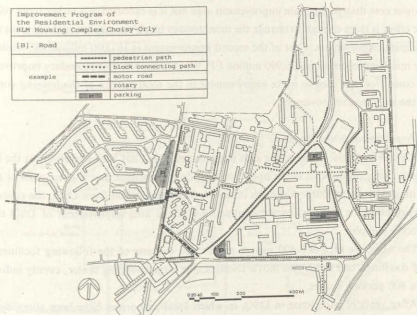


Fig. 10. Improvement Program of the Residential Environment [Roads].

Victoire which is at the edge of the Pierre au Prêtre block and is at the same time at the boundary of the housing complex. By extending Avenue de Victoire to the SNCF national railroad after having purchased the build-up lands and making an underground passage, two roads of old Avenue de Victoire and Rue Paul Lafrenque become one road whose name still remains Avenue de Victoire. Improved points are:

- The newly improved Avenue de Victoire, receiving the transportation from national road 7 and super highway A6 from the direction of Paris, enables direct access to the housing complex.
- The new Avenue de Victoire enables the passage of traffic between old town and the newly rising area which includes the housing complex. The access from each side has been shortened 400 m in distance.

By such improvement of the roads, the geographical isolation of the housing complex has considerably lessened.

4.3 Space Improvement

Space improvement is the secondary improvement of the space after the existing improvement like the square improvement or construction of the facilities. The origin of the word is *Aménagement Interstitiels*, a medical term which means to suture. This secondary improvement is used to arrange the space between all the existing main improvement space. This is a sort of complementary work and was carried out during the second stage of the DSQ after the completion of the main improvement during the first stage. The work is done at a lower cost than in the main improvement area but it is executed in a rather large volume, so the effect is large enough to change the monotonous block's environmental image as much as the main improvement. Cost of the second improvement is 167,000 million FF, while that of the main improvement is 106,990 million FF. What is important is secondary improvement have come from the idea to make improvement in the total surface of the housing complex than the ever spot improvement.

4.4 Improvement at the Periphery

ZAC de Nouvilet is one of the area improvements that has been performed at the fringe of the housing complex. It is the operation outside the complex and is done parallel to the area improvement of DSQ. Although institutionally independent from DSQ, the content of the work could be regarded as the continuation of the area improvement of DSQ that is within the complex.

The objective area is 6,400 square meters and consists of the following facilities: 150 HLM dwellings, one hotel, two movie theaters, one large shopping center, twenty individual shops, 800 parking spaces.

After years of experience in DSQ, in which local authorities have been struggling with and focusing on the housing complex which consists of 60% of the whole population of the city by putting their own resources into the DSQ budget, the whole direction of the plan

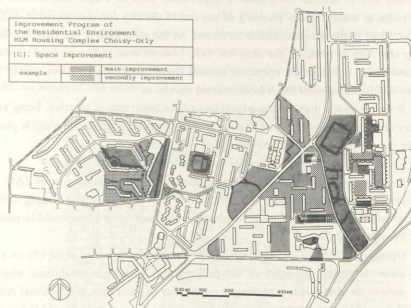


Fig. 11. Improvement Program of the Residential Environment [Space Improvement].

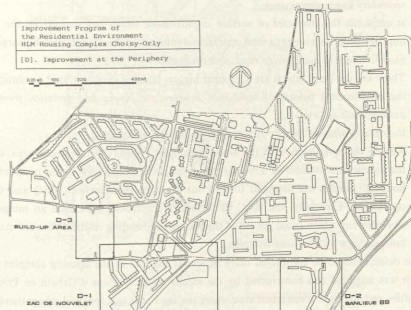


Fig. 12. Improvement Program of the Residential Environment [Improvement at the Periphery].

is on a fair way to success. As it grew in importance, both in weight and volume, there came a phase in which the city planning of the rest of the city and the operation of DSQ, which is limited to the complex, had to be treated on the same base of the city-planning of the Orly city. This is based on the idea that DSQ is more than just one of the nationally designated plans, it is also an operation coming from the strong initiative of the local authority and therefore more like a local oriented operation.

As it shows on the map, taking advantages of the geographical location, being at the boundary of the existing built-up area and the housing complex, ZAC de Nouvlet is planned to realize two purposes from the viewpoint of city-planning.

- Creation of the core of the neighborhood community

By its geographical character, it enables the receipt at the action area of ZAC, flow lines of the inhabitants both from the existing built-up area are the housing complex so that the coexistence of those people in the common living sphere could be realized.

- Promotion of the city

Operation of ZAC is also considered to be a promoting measure of the city on a vast scene. It expects the users of the facilities also to be non-inhabitants who live outside the city including passengers on the way to Paris from the National Airport Roissy (l'Airport d'Orly), who make use of the intersection of the ZAC being the nodal point of the intercity traffic.

We can summarize that the concrete issues set up especially at the second phase of DSQ are representative work of area improvement and they are as follows:

- *secondary improvement area*

It emphasizes the character of surface improvement which has seamed all the spot improvement. Because of its total operational volume the effect is considerably large.

- *block-connection path, motor road, pedestrian-deck*

These are the items which are evaluated highly, because they provided a solution to the architectural defects of *separation between the blocks* and *isolation from the existing built-up area*.

- *the collaboration of the city-planning of the local government*

Aiming the revitalization of the housing complex, priority development area, using the operational scheme of ZAC de Nouvlet and Banlieue 89 at the periphery of housing complex are intended to pull out the synergism between DSQ and those operations. Especially, the ZAC de Nouvlet contributes to create an integrated city-planning which could get rid of the former confronting relation between existing built-up area and housing complex.

The defects should be considered more or less as the fate of the housing complex land of which was acquired and constructed by the means of ZUP (Zone d'Urbain en Priorité) in the fifties and sixties in a suburban area where the land cost was low and where there was no infrastructure. All those geographical defects of housing complex would not have been improved just within the framework of a housing policy, but it was a subject to be improved

within the city-planning. For that reason, they had to wait until a reform in city-planning in 1985 which transferred greater power to the local authority concerning city-planning schemes. Now it's the time all the approach of housing policy and city-planning have brought up together for the DSQ that aims the total revitalization of the housing complex.

Another thing which we can add in the analysis is that within the city-planning scheme of ZAC de Nouvlet and Banlieue 89 they also include the social housing HLM construction

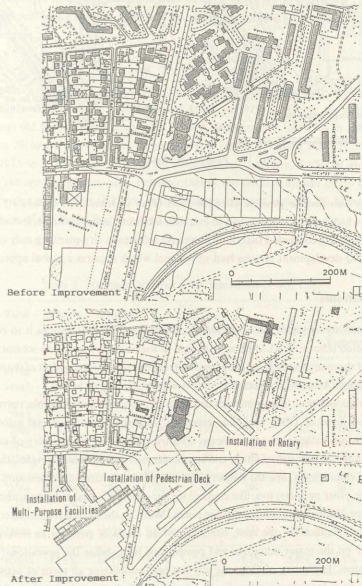


Fig. 13. Program of "ZAC de Nouvlet".

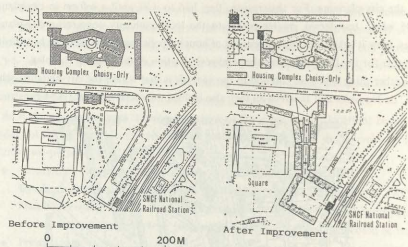


Fig. 14. Program of "Banlieue 89".

scheme. This also became possible after the PLH (Plan d'Orientation d'Habitat) had been launched in which local authorities had to establish a housing supply scheme, including social housings. We finally concluded that those successive reforms in city-planning only could have made the DSQ development process lead to the goal which requires a global approach.

5. Social Activities

Social activity is one of the operational poles of the DSQ that entitles it to be called a total renovation scheme of HLM housing instead of the housing renovation scheme. It is also one aspect of the renovation related program and takes one third of the budget of the renovation related program. Actually, the activities vary from job training to leisure.

At the national level, inter-ministries collaboration becomes indispensable, corresponding to the varied items of DSQ, becoming especially accentuated in the social activities. The collaboration can gather as much as eleven ministries, including the ministry of culture and communication, the ministry of youth and sports, the ministry of women's rights, the ministry of work and employment, and the ministry of social affairs. A national commission brings together all the other partners, too, like councillors, the union of social housing authorities, etc. It is in charge of the main guidelines of the policy. While at the local level a local commission conducts the operation on the spot, consisting of all kinds of partners as well, it depends considerably on the major initiatives and competence to mobilize the operational team and its own services. In the city of Orly, the city has been mobilizing all types of activities from job-training to motor-cross circle adjusting to the local needs and situations, having had years of practical experience in social activities. This kind of flexibility in implementing the

operation could only be possible if there has been a transfer of the power to the local government.

The social activities are targeted at some of the groups according to the inhabitants' characteristics, like aged people, youths, children, housewives, who occupy the living sphere of housing complex predominantly in daily life. But although they are designated for all habitants classified into some groups, it is certain that on the whole program, there are certain categories of people that the public authorities have set their eyes on specifically. To see what they are, we will make a short summary on the characteristics of the inhabitants of the housing complex.

5.1 Age

In the housing complex, the proportion of the inhabitants less than 20 years old was 33.3% in 1982, while it was 46% in 1968, and 41.5% in 1975. In reverse, the group of more than 65 years old has increased from 2.5% in 1968, 4.5% in 1975 to 11.7% in 1982. The age group from 20 to 64 years old shows considerable stable transition from 51.5% in 1968, 54.0% in 1975 to 55.0% in 1982. So as the demographic character, *decline of the youth and increase of the aged people* are cited. But nevertheless this decline, the age group less than 20 years old, with a proportion of 33.3% in the housing complex, is still 5.2% higher than that of the average of the Ile-de-France region.

Table 7. Original Countries of the Inhabitants of Orly City.

Popula- tion	Total	French	Foreigner						
			Spanish	Italian	Portuguese	Algerian	Moroccan	Others Tunisian	
Male	11792	9645	2130	126	278	260	759	361	346
Female	11917	10231	1686	109	205	243	580	256	293
0-19	7893	6370	1523	57	112	189	632	291	252
20-39	7503	6310	1193	59	139	183	363	193	256
40-59	5545	4753	792	85	160	106	260	101	80
60-	2768	2443	325	34	72	25	84	42	51
H. Po.	23564	19904	3760	325	474	501	1318	617	599
S. Po.	145	72	73	0	9	2	21	0	40
Total	23709	19876	3833	235	483	503	1339	617	639
%	100.0%	83.8%	16.1%	0.9%	2.0%	2.1%	5.6%	2.6%	2.6%

H. Po.: Household Population.

S. Po.: Single Population.

Table 8. The Type of the Household of the Inhabitants of Housing Complex Choisy-Orly.

Type of the Household Block	French Household Or. France Proper		Foreigners Household	Subtotal	Vacant	Total
Aviateur-Navigateur Blo.	2.132	1.777	581	2.713	163	2.876
	74%	61.8%	20.2%	94.3%	5.4%	100%
Len-Lo.Po.Fa.Blo.	1.158	1.004	284	1.442	74	1.516
	76.4%	66.2%	18.7%	95.1%	4.8%	100%
Pierre au Prêtre Blo.	942	873	174	1.116	67	1.183
	79.6%	73.7%	14.7%	94.3%	5.6%	100%
Total	4.232	3.654	1.039	5.271	304	5.575
	75.9%	65.5%	18.6%	94.5%	5.4%	100%

5.2 Nationality

When we pay attention to the situation in the Orly city, there are 23,709 inhabitants including 3,833 foreigners which is roughly equivalent to 16% of the whole population, according to the city census in 1982. There has been a transfer in weight from the group of European countries such as Spain, Italy, and Portugal to the Northern African countries, like Morocco, Algeria and Tunisia. Although the nationals from European countries has declined to 31.9%, conversely, the Magreban countries have become predominant which is originally composed of the quite different base of constitution, culture, religion from France.

5.3 Size of the Household

The proportion of the foreign households that are in the housing complex (18.4%) is twice as high as in the existing built-up city (9.4%). Also, the data shows that the number of the people in the foreign household is 3.7, while it is only one half (1.8) of that in a French household in the city of Orly. Assuming these numbers are also valid in the case in the housing complexes, the proportion of the foreigners would be around 32%.

From the data above, it is clear that the housing complex of Choisy-Orly can be characterized as a society that comprises a higher proportion of foreigners and youths.

Here we cite the activities of *Mission Locale*, where is the base of some activities, under the control of the municipality. Among the activities related to employment, housing acquisition, leisure, health and welfare, the employment issue comes first having the background of its nationwide severeness.

Example of the Mission Locale programs:

- job training program for youth organized by the ministry of culture and education
- job training guidance
- orientation for future planning
- interviews and counseling

- contract on the employment of the youth on the spot of the housing rehabilitation
- medical check-up for youths organized by Mission Locale
- movie screening and related debates
- drug and AIDS prevention campaign
- drug prevention program from the the city Orly
- rehabilitation program for youths after imprisonment

The issue of unemployment by itself has already come to the level of a national employment strategy scheme, as the rate has increased to 10.7% in 1987 while it was only 2.4% in 1970 and was still 6.4% in 1980. The city of Orly is no exception and has an unemployment rate of 12.6% which is slightly more severe than the national average. Once narrowed down to the age group of 16 to 25 that the Mission Locale is targeting, the unemployment rate according to sex is 20.7% and 28.5% for male and female respectively at the national level, while in the city of Orly, the unemployment rate is only 9.3% for this age group.

From 1986 to 1988, the change in use of the Mission Locale has been small, just 3%. However, the age group from 16 to 18, the use has arisen by 26.9%, a considerable amount. So especially the younger generation from 16 to 18 in particular is adequately involved in this program and is making preparation to become involved in society in the near future. Forty percent of the user here are from the foreign households.

We can conclude that in the city of Orly, Mission Locale, with lot of activities, obtains

Table 9. Unemployment Rate by the Age-Group.

Age	Unemployment Rate (1975)		Unemployment Rate (1987)	
	Male	Female	Male	Female
15-24	6.7%	10.1%	20.7%	28.5%
25-49	2.0%	4.5%	7.0%	11.5%
50-	2.1%	5.4%	6.7%	13.4%
Total	2.7%	5.4%	8.6%	13.4%

The Source: FRANCOSCOPE

Table 10. The Survey on the Usage of Mission Locale.

Age	Number of Users (1988)			Total Number of Users		
	Male	Female	Total	Male	Female	Total
16-18	59	78	137	65	83	148
19-25	130	170	300	318	360	678
Total	189	248	437	383	443	826

Table 11. The Survey on the Usage of Mission Locale (by age).

	1986	1987	1988
16-18	108	127	137
19-25	315	315	300
Total	423	442	437

Table 12. The Survey on the Usage of Mission Locale (by sex).

	1986	1987	1988
Male	201	209	189
Female	222	233	248
Total	423	442	437

an excellent result in the instruction of youths in their proper lives. It's worth stating that, having the background of national-wide high unemployment, the DSQ policy has not only seized this point adequately, but has also decided to make a positive approach towards this issue within the framework of social activities, stimulating the local authorities to install Mission Locale where they sometimes fulfill their function basically for job training and job creation. As a result, for example in the city of Orly, it has turned out to be quite successful and the rate of the unemployment has become only half of that of the national average of the age group from 16 to 25. If we consider that one of the reasons that the operation DSQ had to be launched as a total renovation scheme was within the social degradation of the HLM community such as vandalism caused by these same youths, we could evaluate the result of social activities in one way or another.

6. Conclusion

In France, the idea of rehabilitation is clearly defined as work that consists of large repair and improvement. We had the result that the total increase in rent of 50% is effectively caused in one way by the increase in the modified area which reflects the changes due to the large repair and the increase in the cost per square meter as a result of the improvement.

The initial purpose of the rehabilitation of the public housing in France was to realize the contract between the government and the housing authorities: as a compensation of receiving the rehabilitation grant, PALULOS, the dwelling should fulfill the NMH living standard.

After the survey it turns out the operation was executed not only to fulfill the NMH living standard, but also to put as much importance in the improvement which is more positive than just renovation means. This has a lot to do with the element of safety that is required as well as the convenience or the new amenity to preserve the stability and safety of the living environment.

This tendency to put much emphasis on improvement is accentuated, when the housing rehabilitation is planned to be executed within the frame of the DSQ operation where they have to treat an accumulation of social issues. Also it is shown in the premium of 30% in the rehabilitation grant PALULOS in the application to DSQ.

We find the origin of the housing complex renovation scheme in 1977 when there was the set up of the rehabilitation grant in all the housing tenure and there was the inauguration

of the living environment improvement program both in private and public sector, OPAH and HVS. Fifteen years have passed since this starting point and eight years have passed since the DSQ launching. Two other operational poles have been set up in DSQ, when compared to the HVS era.

These are area improvement and social activities. By those two operational poles, specifically by the latter one, DSQ was assured the status of a total renovation scheme.

The new movement can be seen in the second stage of the DSQ in the area improvement. The aim of those actions is to settle the problem of housing complex defects, apart from the housing defects which had existed from its inauguration, by the adjustment and cooperation with the local authority's city planning administration. In the initial rehabilitation scheme, there had been a dominant intervention from the housing authority, while in DSQ, as is established under the name of the total renovation scheme, there exists a strong intervention from the side of the local authority as well.

The intervention of the local authority is also much more essential and decisively needed in the case of social activities. Local oriented development would be possible with the condition that there exists a local commission on the spot which is capable to mobilize all the related organizations towards the local desires.

From 1988, institutionally, operation DSQ has been integrated within the territorial program which is much larger in scale, under DIV chaired by Yves Dauge. We can see the characteristics of these territorial programs as DSQ which are backed and reinforced by specific programs which receive additional funding as comprehensive. This is because once the territorial program was chosen, all possibility in the selection of the specific programs which come supplementary would be available if there is the direct contract between the government and the local government.

At last we have to stress the fact that DSQ relies on the support of other independent systems such as the housing benefit system APL or the decentralized housing complex management system. For example, the purpose of setting up the housing benefit system APL is to ease a wild fluctuation in housing expenditures and ensure to guarantee a fair charge to the inhabitants. In DSQ, as housing rehabilitation is one of the operational pole, such kinds of support, originally apart from DSQ, are required.

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