

Collaborative Planning and Mobility Concept of Freiburg-Vauban



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Summary

Between 2000 and 2005, the sustainable district Vauban became most famous because of its solar architecture, energy saving buildings and further sustainability concepts, e.g. water protection, green spaces and transportation. Many reports and articles give focus on those topics. Now, 10 years later, many of those issues became much more common and they have been adopted by many urban development projects. To elaborate the lessons that still can be learned from Vauban, it is important to look into the process which evolved the sustainability concepts, rather than describing its results once again. Consequently, this article puts its focus on the unique planning and implementation process of Freiburg-Vauban.

Keywords: public participation, bottom-up process, 'planning that learns'

1. Introduction

When the French military deployment vacated its Vauban barracks in Freiburg in 1992, the idea of creating a new city district on the site inspired urban planning experts and many people in the city and beyond. The site, only 3 km away from the centre of town, offered a rare opportunity to deal with the housing shortage, to offer space for commercial areas, and right from the planning stage onwards to integrate social and ecological aspects into one coherent overall concept. Now, 20 years on, Vauban is complete and the infrastructure is running.

By the autumn of 1993 the urban development measures were under way. Within this framework housing for more than 5000 individuals, as well as about 600 jobs, were to be created on the site by 2008. The district's name was inherited from that of the army barracks. Sébastien le Prestre de Vauban (1663-1707) was King Louis XIV's great military architect, responsible for the fortification and (partly) destruction of Freiburg. Because of the growing friendship between France and Germany, there have been no thoughts of revenge or obstacles to retain the French name. Today, the name "Vauban" is also symbolizing sustainable urban development and architecture. The street names in the neighbourhood commemorate women's rights activists, female scientists, anti-fascists and artists persecuted during the Third Reich.

The new district of Vauban has an area of 38 hectare (380 000 square meters) and is located in the southern part of Freiburg, a city of 230,000 inhabitants in the south-west of Germany. 16.4 ha are a designated residential area, 1.6 ha commercial area and 3 ha mixed area. The south and west consist mainly of parking-free residential streets, largely developed by building collectives and individual owners. In the north east there is a mixture of commercial and residential buildings. On the west side of Merzhauser Straße ten former barrack buildings have been converted, partly by the student housing union, and partly by the housing project S.U.S.I., into shared apartments. The site of the former sports field to the east of Merzhauser Straße is shared by the terraced houses of the 'Solar Settlement', the shop and office block 'Sonnenschiff' ('Sun ship') , and property developers' blocks of flats. The tram tracks form the district's main axis. Along this axis lies the social heart of the new district – the main Square 'Alfred-Döblin-Platz' and the Neighbourhood Centre 'Haus 037' – and a few businesses. In the South lies another square, Paula-Modersohn-Platz, on which there is a primary school, a sports hall, some more shops, a tram and a bus station and one of the district garages. At the end of 2008, already more than 5000 people resided in the district. 1520 (30%) of them were under the age of 18, whereas only 112 (2.2%) were over the age of 60. More than 10% did not have German citizenship.



Green Vauban district – overlooking the south-eastern part towards Black Forest Mountains;
Photo: Jörg Lange

2. Methodology

Substantial information was personally gathered and reflected while working with the Forum Vauban project team 1995-2002 and afterwards. The author occupied key responsibility on investigation, publication and the scientific support of the Vauban participation process. Furthermore, the project was reviewed and evaluated several times:

- by the Institute for Applied Ecology (Öko-Institut) between 1998 and 2002 [1], [2],
- by the DLR Institute of Transportation Research, scientific partner in the project “Support for the Implementation of the Vauban mobility concept” in 2002/2003 [3], [5],
- by the RWTH Aachen University Chair of Planning Theory and Urban Development in 2013/14 [6].

The above named studies' methodology basically insists on interviews of 'key players' representing different 'spheres' and viewpoints (eg. administration, politics, civil society and private enterprises). The study of DLR also carried out a survey among Vauban citizens. To measure the sustainability impacts, the Öko-Institut also used Material-Flow Analysis as a Valuation Tool (this paper does not put focus on that issue). In addition to that, the city of Freiburg is frequently providing statistical data about the district [4].

3. Description and Discussion of the Planning Process

Large parts of the district have been developed within three phases. This allowed a flexible approach called “planning that learns”. Within this framework, it was possible to try out new concepts of urban development and then decide if they would be applicable for the entire district. This kind of flexibility was very helpful during the planning and participation process.

Even before the final French pull-out from the Vauban army barracks, various groups had already begun getting involved with plans for the area. As a result of this process the NGO “Forum Vauban” was established in 1994. In 1995 the City of Freiburg assigned the Forum with the coordination of "extended citizens' participation" in the planning and construction of the district.

This was and still is a very unique concept of involving the citizens right from the beginning. Usually, administration are the “leading players”. They do offer participation and citizens take part (or not). Participation 'a la Vauban' marks a real shift from a “top down” towards a “bottom up” approach (see table 1 and figure 1).

Table 1: Four steps towards the extended citizens' participation in Freiburg-Vauban

Step	Action
1	The City of Freiburg – being the responsible legal body – bought the entire area from the Federal Government. The City's Building Department took key responsibility to manage the entire development process.
2	The City Council announced to develop the new district in a cooperative way and named it 'extended citizens' participation'.
3	The NGO 'Forum Vauban' was acknowledged to be the city's partner, named 'official body of the extended participation process'.
4	The Forum claimed a responsible position in the process with focus on sustainability issues. It received moderate financial support.

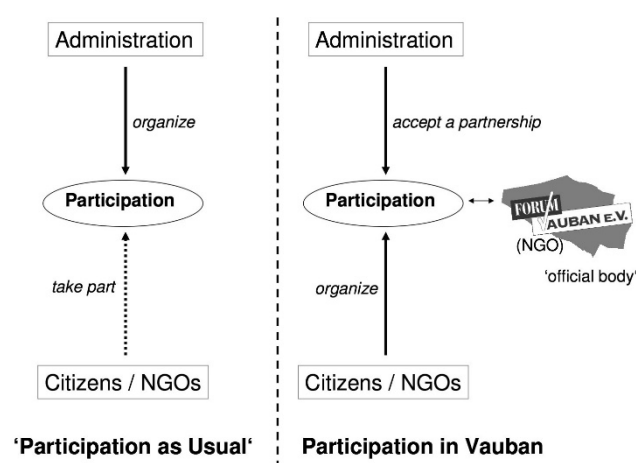


Fig. 1: Participation – from 'Top-Down' to 'Bottom-Up' approach

Following the first public gathering, working groups for issues like traffic, energy, building collectives and women's issues emerged, which set out to elaborate an overall concept for a socio-ecological model district. Until the end of 1999 these volunteers were assisted, both in content and organization, by a full-time office staff employed by Forum Vauban. This was made possible by funds from the City of Freiburg, the German Federal Foundation for Environment (DBU), and the EU's environment program LIFE.

Due to its skilled work and its advisory participation on the 'City Council Vauban Committee', the Forum has been able to make an impact on many policy decisions. The Forum has carried out extensive public relations work to arouse interest in settling in Vauban, for example in the district's journal 'Vauban actuel', started in 1996.

With the Forum's help, many building collectives have been set up, including the 'Genova' building co-operative. Furthermore, the Forum has initiated and facilitated citizens' participation in several individual projects, such as the design of the residential streets, the outline of the centrally located Market Square and the conceptualization of the neighbourhood centre 'Haus 037'. In table 2 the objectives of the Vauban project are listed, a) which have been in focus right from the beginning, and b) which came up during the collaboration (participation) process. Indeed, a future-oriented, creative planning process needs both: a solid fundament and, additional to this, creative potential for innovation.



Publicity campaign and workshop organized by Forum Vauban.
Photos: Carsten Sperling and Forum Vauban

This system, which seeks to bring all concerned parties together in an intelligent way of planning, has brought about many changes. The fundamental course setting towards a sustainable district would certainly have turned out different without the strong commitment of the first residents and the possibilities for participation in the decision-making process. To elaborate their ideas, committed citizens have to work hard and patiently. To do so, additional resources are obviously needed. A larger-than-usual dose of public participation can only lead to success when all the participants – policymakers, administration and citizens – are seriously prepared to approach one another without reservations or old role perceptions.

Table 2: Freiburg-Vauban – main objectives

	a) City of Freiburg	b) Public Participation (Forum Vauban)
Construction	2000 housing units (5000 residents); high quality building spaces for young families on the city's territory; dense urban design concept; diversity: preferences for private builders instead of (big) investors	promotion and support of building within self organized groups – formation of building collectives (co-housing projects, 'Genova' building co-operative)
Energy	improved energy standard for all houses and central co-generation plant	special areas for passive solar houses and preferences for builders with advanced energy concepts; co-generation plant with wood chips
Mobility	good public transport (incl. new tram)	car-free project combined with a specific traffic concept and alternative mobility offers
Infrastructure / Public Space	short distance: social & commercial infrastructure (child care, school, shops, 'green belts')	car-free streets; centrally located market place and neighbourhood centre

Figure 2 shows the structural integration of those the three “spheres” between 1995 and 2004. Within each “players' sphere” (administration, politics and civil society) one “centre of competence” has been formed to consolidate the necessary resources for managing the project.

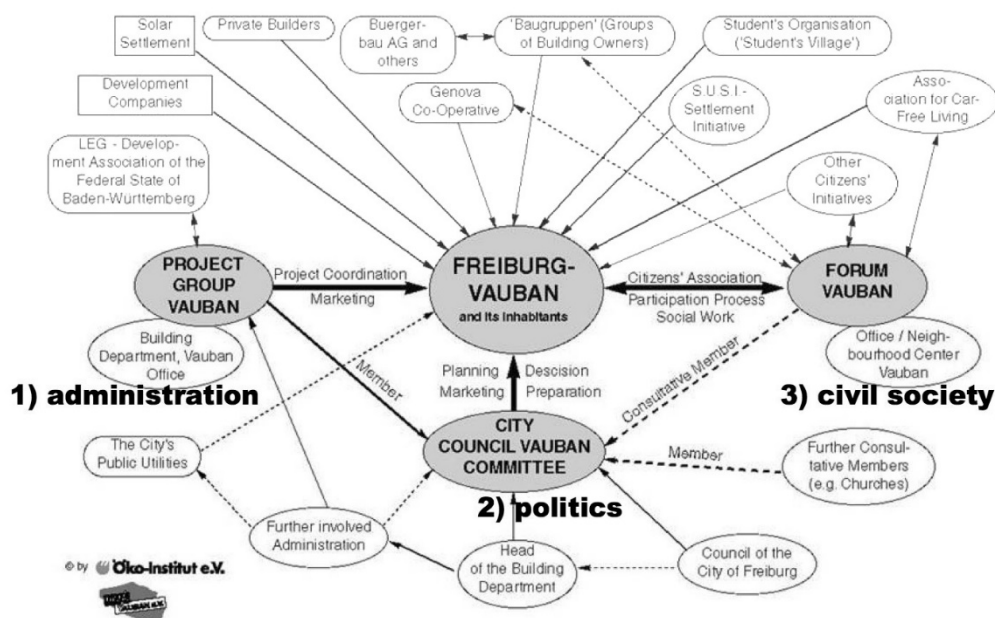


Fig. 2: Structural integration of the participation process (figure taken from [1], modified version).

In fact, it is necessary to differentiate between civil society and economic players in the process of urban planning. Usually, representatives from civil society are not “in the first line”. Urban development projects are rather carried out between administration, policymakers and the private enterprises such as building developers. Those “private players” usually take the central position of investing, managing and providing services. But they do it for 'the market' and in most cases put focus on 'mainstream demands'. In Vauban, private enterprises have not been allowed to take that strong position. Civil society was able to become the “third force”. In the case of Vauban, NGOs have not only been able to “fill the gap”, but to provide substantial sustainability impacts because they are much closer to the people who live in and shape the new neighbourhood.

4. Results

The mobility concept

In retrospect, the Vauban mobility concept can be identified to be the most spectacular result, because of its effects on sustainable lifestyle: In the entire district, there is comparatively little motorized traffic. There are no car-free areas, but most of the residential streets are “parking-free”. This means that stopping is only allowed for loading and unloading. Parking places are to be found only in the district's garages and, for visitors, on Vaubanallee. Residents of the 'parking-free' streets may opt to be 'car-free' or 'parking-free' and both live harmoniously side by side.

Car-free residents agree not to use a private car on a regular basis. Because of this, they do not need to buy a parking space in the district's garages. But according to the state building regulations they need to reserve some space for parking that may be needed in future. This obligation was almost impossible to be implemented in a densely-built district like Vauban. Finally, the idea came up to reserve the parking space collectively. To do so, the 'Association for Car-Free Living' was formed, which

- bought a comparatively small piece of land,
- planned a mechanical garage, that could host all the (not existing) cars of car-free households and
- proofs for the parking space by signing contracts with them.

Until today, this garage is only virtual and the space is used as an area for re-creation. If no space would be left in the existing garages one day, the association would start to install the first parking lots. Car-free residents also must submit a declaration once a year in which they state that they are still living without a car.

Residents who own or regularly use a car become “parking-free”, which means they may use a car normally but must buy parking space in one of the district garages and park their car(s) there. Real estate developers and private landlords accordingly offer 'car-free' and 'parking-free' apartments. At the end of 2007 out of about 1000 households in Vauban's parking-free zone more than 420 participated in “car-free living” [4].

In this way, the cost of building and maintaining the garages is spread fairly. Those who live without a car do not finance the garages with their apartment rent payments, as it is common practice in practically all new housing projects. In Vauban, the car-users bear all the costs of the parking spaces instead. The parking-free residential streets have become places where neighbours can meet and children play. Their car traffic function is clearly secondary.

Vauban provides good foundations for reduced motorized traffic. The fact that a primary school, kindergartens, market and shops are all on site has turned the vision of the 'district of short distances' into reality. The railway station and the town centre can be reached within 15 minutes by public transport. About 20 Car-Sharing vehicles are also available in the district.



The vast pedestrian zone parallel to Vaubanallee (left) and dooryard in the “parking-free” zone of Vauban (right). Photos: Carsten Sperling.

The success of the traffic concept is noticeable: there is substantially less car-traffic here than in comparable districts. In Vauban, there are only about 165 motor vehicles per 1000 residents, whereas the country's average stands at over 500 [4]. The success of “car-free living” has also been distinctly greater than anticipated. The area where “car-free living” is possible, has been extended from three residential streets, as originally intended, to large parts of the second and third development phase.

The majority of car-owning residents have now gotten used to the few minutes' walk or bike ride to the collective garages, and most of the “car-free” residents abide by the agreed obligations. However there have been occasional disputes with those not willing to abide by the agreed rules. The 'Association for Car-Free Living' has been working for years in close cooperation with the City Council on the further development of the traffic concept in Vauban.

Further key-results: Public green spaces, co-housing projects and energy savings

Because it's not in the focus of this paper, just a few words about these issues: Public green spaces in the city contribute greatly towards residents' feeling of well-being in their living environment. This applies especially to the densely-built district of Vauban. The numerous 60-year-old trees, of which only a few were cut down during the site's development, play an important role in providing local greenery. The old avenues along Vaubanallee have been supplemented by new planting. Five Green Spaces have been laid out among the residential streets stretching north-south through the district. As a result, each has its own character and is used by diverse resident groups.

From the beginning, two important objectives have been to achieve diversity in the residents' living styles and to enable people from many strata of society to purchase their own homes. The formation of building collectives was a new possibility for realizing these urban planning goals as they pave the way to cost-effective and need-based living space. The enabling and advising of building collectives was one of Forum Vauban's initial main tasks. The idea is simple: several households join forces, decide on a piece of property, plan the building collectively, hire an architect and building firms and so save time and money. This indeed is not an easy task: For the city administration (owner of the entire property) this meant to take a lot more efforts during the marketing process. Not a few big investors, but each member of a building collective had to (co-) sign the contract. Forum Vauban also gave much support to this process, e.g. by organizing workshops to form groups and to learn the necessary skills.



Impressions from Vauban: Photos below show the first multi-storey passive solar house, completed in 1999 (left), and the neighbourhood centre, based in a refurbished former army barrack building. Photos: Carsten Sperling.

For many families the formation of a good neighbourhood by this joint planning and building was an important motivation to build as part of a collective. In the early stages, potential builders got together based on their personal contacts. Later on, building consultants took over important organizational responsibilities, or even acquired the land deeds first and then went about organizing a building collective. Up to now, more than 50 building collectives have realized their housing projects in Vauban. Most of them implemented sustainability and energy standards which were higher than required (by the official building regulations). For example, all passive solar houses within the first and the second development phase have been put up by building collectives.

Conclusion

The Vauban project turned out to be a success and was awarded “world wide best practice” by the United Nations Human Settlements Programme (UN-Habitat) in 2002. This paper analysed the process of public participation. The main characteristics are:

- The City's announcement to guarantee for an open process – “planning that learns” has been taken seriously: Many players were able to contribute to the sustainable design of the Vauban district.
- In spite of several conflicts and different viewpoints – in the end it turned out that each key player could do his best job: E.g. City officials did provide a solid fundament concerning planning methods, project management and ecological issues, while representatives of the NGO-based public participation were able to implement most innovative concepts in the fields of mobility, collaborative building projects, public space and neighbourhood development.
- Due to this kind of collaboration, it was possible to activate a ‘critical mass’ of citizens to be pioneers and early adopters of sustainable lifestyle: many of them are both residents and stakeholders.
- Public commitment is a crucial resource. The partnership between the City and Forum Vauban (extended citizens' participation), combined with a moderate financial support, made this commitment available for urban planning.
- Within sustainable urban structures it's easier (or even possible) to be a responsible consumer. Citizens can also become ‘co-producers’.
- Appeal to urban planners: Have faith in the creativity and the responsibility of your citizens / NGOs!

Acknowledgements

The brochure “Quartier Vauban – A Guided Tour”, published by co-author Hannes Link and Vauban Neighbourhood Association with support of FWTM Management and Marketing for the City of Freiburg [4], gives an overview, looks at how ideas have been turned into practice and summarizes the results. The booklet was published in English and Chinese language to accompany Freiburg's presentation at the EXPO 2010 in Shanghai. Parts of this article are taken from that 48 pages booklet.

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