

Soft densification of single-family home areas: morphologies, experiences and perspectives for the development of densification policies

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Introduction

Single-family home areas are faced with specific challenges corresponding to the dynamics of local and regional development. In economically less dynamic regions, they have recently been confronted with the process of shrinkage and the appearance of vacancies. The situation is quite different in economically dynamic city regions with a tense housing market, where these areas can go through a process of densification, particularly if they are well located within the city region. Besides the market-driven development, the densification of single-family home areas can also become part of specific urban development policies that aim to make these areas more sustainable.

In our paper we focus on market-driven or owner-driven soft densifications of single-family home areas that are realised individually within the framework of the existing building planning and building law. The term 'soft densification' was developed first in the French context in order to describe a form of densification that does not change the prevailing urban form radically (Léger 2010; Touati-Morel 2015). Even if the soft densification practices do not radically transform the morphology of the neighbourhood, they are often contested by the neighbours who do not participate actively in the densification process (see for example the well-organised protest movement in Munich: <http://www.bvobermenzing.de/flyer-gartenstadt.pdf>). Under certain conditions, densification seems to be experienced by the neighbours as a form of deprivation and loss of quality of life. If soft densification is to contribute to a more sustainable urban development, it is necessary to understand the passive neighbours' experience of deprivation and to develop a form of densification policies at the level of the neighbourhood that also takes into consideration the concerns of the neighbours. Our contribution is built on the results of an international research project (realised in the frame of the PUCA soft densification policies research programme: *Vers des politiques publiques de densification et d'intensification "douces"?*) that analysed, in two case studies in the

city regions of Lyon (France) and Munich (Germany), the neighbours' experience of soft densification. The study is based on the assumption that not only the material form of the densification but also the image of the neighbourhood and the public discourse influence the neighbours' experience of densification. Our paper is structured in three parts.

The first part deals with the description of densifications in the case study neighbourhoods of Pont-des-Planches in Vaulx-en-Velin near Lyon and Waldtrudering in Munich that have been realised within the last five years. The second part focuses on the negative experiences of soft densification by the passive neighbours. It is based on more than 30 semi-structured interviews with neighbours of plots transformed by densification in both case study areas and a detailed description of surrounding densifications. The third and last part addresses conclusions that can be drawn from the project for the development of planning policies that consider soft densification not only as an individual concern but as a matter of neighbourhood development.

Morphologies

The project made apparent that soft densification can take different forms and must be understood as a regionally and nationally embedded process (table 3). In Waldtrudering (Munich), the densification process is dominated by the destruction of the existing single-family homes and replacement by small blocks of apartments, terraced houses or semi-detached houses, whilst the densifications in Pont-des-Planches (Vaulx-en-Velin) take various forms, with horizontal extensions predominating.

In Waldtrudering the densification process is, to an important degree, realised by small real estate companies. The real estate companies aim to maximise the profit and therefore exploit the existing building authorisation for the plot to the greatest possible extent. This leads to a transformation of the neighbourhood such that what was previously characterised by plots with big gardens and small single-family houses now becomes a neigh-

Tab 3: Total number and forms of densifications in Pont-des-Planches and Waldtrudering (source: own work)

	Vaulx-en-Velin (Pont des Planches)	Munich (Waldtrudering)
Total number of densifications	62	49
Vertical extensions	2	-
Horizontal extensions	25	-
Divisions into flats	2	-
New building after demolition	8	39
New building on empty or divided plot	25	10



Fig 23: Old house on a plot with big garden and new semi-detached house in Waldtrudering (source: google street view [left photo], Kazig 2016 [right photo])

bourhood whose plots are to a large extent built up with small blocks of apartments, terraced houses or semi-detached houses with only small gardens (figure 23).

Pont-des-Planches is still characterised by a mixture of housing with small industries. The latter are replaced more and more by residential buildings through the process of densification. A characteristic of the densification process in Pont-de-Planches is the extent of owner-driven developments. The consequence is not

only a large amount of horizontal extensions that are inhabited by the members of the family that lived in the original house, but also the construction of a new house on a divided plot or an empty one (figure 24). The densifications in Pont-des-Planches are often realised not in one step, and are completed according to the availability of money: this contributes to an appearance of an unfinished and quite heterogenous neighbourhood.



Fig 24: Old house and horizontal extension and new building on divided plot in front of the extended house in Pont-des-Planches (source: google street view [left photo], Paris 2016 [right photo])

Experiences

The interviews we carried out revealed different reasons that can lead to densification being experienced as a deprivation and loss of quality of life. We will focus in this paper on two aspects that are present in both neighbourhoods of our project: the loss of intimacy and the loss of its idyllic character.

Loss of intimacy

To preserve one's intimacy in the context of dwelling means not to be seen and heard by the neighbours and not seeing or hearing them without having taken the decision to do so. To preserve one's intimacy means establishing a certain distance between oneself and the neighbours. In comparison to an apartment, a single-family home allows one to keep a distance from the neighbours and to develop a way of dwelling where the intimacy is well protected (Raymond et al. 2001). The densification of single-family home areas implies that the established distance between neighbours is reduced.

A loss of intimacy concerns above all those neighbours whose plots are directly in contact with the densified plot. Neighbours who live on the other side of the street of a densification are generally less impacted. How far a direct neighbour experiences the densification next his house as a loss of intimacy depends on a combination of material and social aspects. One important aspect is the orientation of life or – as one of our interviewees put it – the “dwelling side” of the existing house and garden that are not modified, as well as in the densified house and garden. The important parts of social life at home are very often located in one side of the house or garden. A densification is, above all, considered to result in a loss of intimacy if the “dwelling side” of the unmodified house is orientated toward the densification and if the “dwelling side” of the densified plot is also oriented toward the unmodified house. If this is not the case, densification can be very close to the boundary of the existing plot, without significantly disturbing the intimacy of the existing inhabitants.

Various participants in our study who were experiencing a loss of intimacy through densification tried to adapt to the new situation. One way of adaptation that is often cited consists in the development of new forms of inhabiting the house or garden, by changing the location of certain activities and moving them to

less exposed parts of the house or garden. The adaptations are only marginal in some cases, but can also include significant reorganisation of the use of rooms in the house. In some cases, the neighbours have no alternative, and decide to abandon the use of parts of their house or garden for activities such as sun bathing, for example. The use of existing visual or sound protections or the construction of new protections is another possibility for neighbours to adapt to the new situation. The latter are used even though they can be associated with significant expenditure.

The adaptations normally contribute to regaining the intimacy lost through the densification. But for various interviewees, they do not completely re-establish the quality of life they had before. They experience the adaptations to the way they inhabit their house or garden as a loss of liberty, and in this respect a loss of quality of life. For this reason, some of the interviewees refuse adaptations, even if the sense of intimacy in their house or garden is affected by the densification. A loss of the idyllic character is a further reason why the quality of life is not completely re-established. We shall deal with this in more detail in the next section.

Loss of idyllic character

According to some authors (Berque et al. 2006), the development of single-family houses is built on the quest for an ideal European landscape: the Greek Arcadia. Arcadia is the image of the gentle countryside, an ideal place inhabited by herdsmen living in harmony with each other and with nature. It is the subject of an idyll, a form of poem in Greek antiquity. The term ‘idyllic’ nowadays denotes this ideal of landscape and society that is pleasant and peaceful. The densification of single-family home areas is experienced by various inhabitants in a way that can best be described as the experience of a loss of the idyllic character of the neighbourhood. In contrast to the loss of intimacy, which relates only to the experience of home life, the loss of the idyllic character can refer to the dwelling experience at two different levels: life at home and life at the level of the neighbourhood in the sense of the district.

In terms of its landscape dimension, the experience of life at home as idyllic is based to an important degree on the garden of the neighbour. Densification is normally accompanied by a reduction in trees and other vegetation, and the extension of buildings on the plots which, above all in the case of new constructions or



Fig 25: View from inside a neighbour's house toward a new building that is built only 3 metres from the boundary of the neighbour's plot (source: Kazig 2016)

horizontal extensions, are nearer to one's own house. These modifications, and the strengthening or establishment of new visual and sound protections, lead to a less pleasant view of the immediate environment from one's home. Some neighbours experience the densification as a loss of space or even feel confined (figure 25).

The quality of neighbourhood relations also contributes to the idyllic character of home. They can deteriorate for various reasons due to the densification. We will focus here only on deterioration of neighbourhood relations due to cheating in the context of the densification process. This occurs when densifiers do not respect the building permission and their construction exceeds the authorised size or form. Above all in Munich, where the immediate neighbours have to be informed by the densifier about the densification project before its realisation, they relate the cheating to themselves. This experience can lead to a long-term deterioration in relations between neighbours. For inhabitants who were

not taken into consideration by a densification project in the immediate vicinity of their property, knowledge of the ongoing densification process in the neighbourhood can create worries about being directly affected by this development in the near future. The observation of the process in the wider neighbourhood and the anticipation that this could happen in the immediate neighbourhood threatens the carefree nature of life in one's own home, and contributes in this way to a loss of the idyllic character of life in one's own property.

There are also different experiences that detract from the experience of the district as idyllic. The first one is based on the disappearance of existing architectural and landscape heritage of the district. The districts of both of our case studies originate from the beginning of the 20th century. They have constantly changed and developed since then, but have conserved elements of their history in the form of specific architectural forms and characteristics of the gardens. Even if the two

neighbourhoods are not urban heritage areas, inhabitants who have lived in the neighbourhood for a longer period of time can appreciate the specific form of the neighbourhood as pleasant and become attached to it. The uniform style of more recent densifications, the loss of vegetation in the neighbourhood that goes along with them and the spread of opaque fences between plots cause a deterioration of this experience of the neighbourhood. The densification also impacts the neighbourhood relations in specific ways that make life in the neighbourhood less pleasant. On the one hand, inhabitants deplore the growth of anonymity with the arrival of new inhabitants due to the densification. Above all in Vaulx-en-Velin, they also experience it as a growth in the communitarianism of specific groups that are more focused on their own community and less open to the rest of the inhabitants. The interpretation of the densification as an unbalanced social development, a development where some inhabitants lose and others win, is another expression of the deterioration of the experience of the district as idyllic.

Densification policies

The project has made it apparent that soft densification – even if it is characterised to a large extent by respect for the existing morphology of the neighbourhood – is not always experienced by the neighbours as soft. The loss of intimacy and the loss of the neighbourhood's idyllic character are two reasons that explain why neighbours of densification projects experience them as a deprivation and a loss of quality of life. Densification policies that aim to foster the densification of

single-family homes as a form of sustainable urban development should take them into consideration. The following principles and instruments would contribute to densification policies that are more sustainable in this sense. They lead to an understanding of densification that considers it not only as an individual concern but also as an integrated process of neighbourhood development of single-family home areas. We will present two principles that should be integrated into such a form of densification policies. The first one is related more to the experience of loss of intimacy, the second one to the experience of loss of the idyllic character of the district.

The first principle aims at the introduction of a respectful attitude in the policies of densification towards those inhabitants who are living directly next to a densification project. This should be realised by taking them into consideration in the application for a building permit, an obligation that to a large extent does not exist in the legal framework of the countries of our case studies. The application for a building permit should contain a part that focuses on the dwelling sides of the immediate neighbours, and elaborates how the densification project takes them into account and intends to minimize the impact on them. The obligation of the densifier to inform the direct neighbours of the densified plot about the densification project is a further element of a respectful densification policy. The experience of the German case study, where there is an obligation to inform the owner of the plots that are in the direct vicinity of the densified plot, shows that the contact between densifier and neighbours can lead to small ad-



Fig 26: Starting point (left) of a simulation in Waldtrudering and some architectural elements (right) to be used in the simulation (source: Kazig, Paris & Simone 2016)

justments of the densification project and improve the project from the neighbours' point of view. The combination of both obligations would contribute to a legal framework that leads densifiers to take into consideration the concerns of the neighbours without imposing too onerous burdens that would inhibit the process of densification of single-family home areas.

The aim of the second principle is to conserve the idyllic character of the neighbourhood in spite of an ongoing densification. The proposition is to develop, with the participation of the existing inhabitants, design guidelines for the development of neighbourhoods that are supposed to go through a numerically significant process of densification. In our project, we tested a tablet-based simulation tool (Renk & Simone 2012) that allows the inhabitants to simulate densification projects that would be acceptable to them. The tool consists of a view of a plot where densification is to take place, and the surrounding urban landscape of this plot that is representative for the neighbourhood (figure 26).

The users of the tool can use a set of architectural and landscape elements in order to simulate a densification of the plot that they consider to be acceptable. After finishing the simulation, the participants were asked to present the results of their simulations to each other and discuss them. This kind of tool could be used to organise inhabitants' participation, in order to elaborate design guidelines for the densification of the neighbourhood. The testing of the tool in our case studies taught us that it is a helpful instrument to work out those characteristics of the neighbourhood that are valued by the existing inhabitants as a kind of ordinary heritage, and to determinate forms of densification that are unacceptable to them because they are considered to cause the character of the neighbourhood to deteriorate. These two categories of simulation results should be used as input for the development of design guidelines for the neighbourhood that describe possible forms of densification that allow shared everyday aesthetic qualities of the district to be preserved.

Both principles that we presented here can be seen as a step towards a new understanding of the development of single family-home areas that takes into consideration their specific urban and landscape qualities and contributes to an integrated development of these areas.

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