Proceedings of the 6th Annual Architectural Research Symposium in Finland 2014: Designing and Planning the Built Environment for Human Well-Being



Governing domestic space: Townhouserelated living, gardens and the homemaking process in Finland.

Eija Hasu

Department of Architecture, Aalto University eija.hasu@aalto.fi

Abstract

Despite the increasing level of urbanization, the housing preference for smallscale housing is still dominant, not least because of the gardens. Urban planning and housing design hence constantly seek options to deliver the housing preferences for small house living. In the Finnish context, one vividly discussed opportunity in this setting is the townhouse typology. The townhouse offers various opportunities, both regarding the urban cityscape and individual home creation. Indeed, making a house become a home is an important process to residents. An essential part of this is that the residents have the possibility to personalize their own dwelling, including the outdoor spaces like gardens and yards. This process, nonetheless, demands domestic governance, and privacy.

This article scrutinizes the home-making process in the light of three studies that all reflect the domestic space as experienced by inhabitants in townhouserelated contexts. The results are presented in a form of hierarchical examination to reflect the domestic governance. The examination indicates that townhouserelated living is compressed with aspects that may either boost or hinder the home-making process. Concurrently, this article suggests that in addition to understanding the role of gardens as part of townhouse design, even urban planners are required to pay attention to the role of gardens as part of the home-making process. For this purpose, the hierarchical analysis offers one prominent approach.

Introduction

Despite the increasing level of urbanization, the housing preference for smallscale housing is still dominant in Western countries (Evan and Unsworth, 2012; Vasanen, 2012; ÆrØ, 2006; Rapoport, 2005). Therefore, urban planning and housing designers constantly seek new options to answer the demands of combining urban consolidation policies and housing preferences for small houses with gardens. Considering this aim, townhouses have been identified as a prominent housing typology in Finland. In this context, a townhouse is defined as an urban, one-family house, or a terraced house that has two to four floors, and it is connected with neighbouring houses with firewalls (AEF, 2014). In addition, townhouses are considered most often as owned, both the building and the plot (Jalkanen et al., 2012), which relates with Finnish housing preferences about the tenure (Strandell, 2011). Yet, the townhouse as such has not received interest amongst Finnish urban families, who are considered the primary target group (Jalkanen et al., 2012; Mälkki, 2010).

The interest that townhouses have raised has mainly been studied in Helsinki City Planning reports investigating townhouse potentialities (Jalkanen et al., 2012; Manninen and Holopainen, 2006). Some internationally comparative studies have been introduced during the last few years, analyzing the Nordic context (Hämäläinen, 2013), German townhouse development (Ullrich, 2014),

and townhouses in the Netherlands (Ellilä, 2014), all emphasizing either institutional or architectural aspects. Aspects of residential aspirations have been studied only on a minor scale, mainly with an interest in the construction process (Fogelholm, 2003; Malminkartanon pientalot, 2005) or townhouse accessibility (Saarelainen, 2010). An exception has been the URBA project, which embraced townhouses as one of its research themes. In the townhouse setting, a series of professional workshops on townhouse development were arranged in 2009-2010, with conclusions encompassing the residential perspective as well (Mälkki, 2010; Hasu, 2010).

In addition, as a typology offering individual smallscale living in an urban environment, with good public transportation and services, townhouse might also answer the needs for sovereignty. Mälkki (2010) summarized the townhouse as offering potential to create new housing areas, or to be used as a means of infill-building. In this sense, townhouses are a prominent element to diversify otherwise monotonous highrise building stock, which is especially typical in Helsinki. Thus, the townhouse would serve as a typology offering individual small-scale living in an urban environment, with good public transportation and services. In addition, a Finnish preference for privacy has been identified in townhouse research (Jalkanen et al., 2012) thus implying that the concept might also answer the need for sovereignty (Lapintie, 2010). Townhouses are hence offered to diversify the current housing supply, especially in the urban setting. The concept is primarily aimed at families with children, or households that need a place for work attached to the apartment (Jalkanen et al., 2012). A newly reported study about the Finnish townhouse interest nevertheless indicates the potentialities as wider than just families with children; townhouses might appeal to solo dwellers and couples as well, covering a wide age range (Hasu, Tervo and Hirvonen 2014). Still, townhouses have not aroused interest amongst home buyers (i.e. HS). The obvious gap between preferences and reality thus needs a versatile examination, to which this article seeks to contribute.

Choosing a townhouse, making a home?

Meaning of home

For many decades, the meaning of home has been widely discussed (Mallet, 2004; Moore, 2000; Sixsmith, 1986; Somerville, 1997). Despite an extensive number of articles on its meaning, the home remains a complex concept. Typically, much of the work concerning the meaning of home has remained theoretical (Sixsmith, 1986), notwithstanding some exceptions (Smith, 1994a; 1994b; Marcus, 1995). Despite the theoretical emphasis, the field nevertheless lacks a coherent theoretical background (Sixsmith, 1986).

One of the widely accepted examinations of the meaning of home was offered in 1991 by Després (Annison, 2000), who recognized ten categories that entail the meanings of home. Després' list is similar to Tognoli's (1987) but is more extensive; in addition, it is based on research about people-environment relationships. The approach is especially intriguing in the urban context, which is related to the townhouse. Després denotes that home is a reflection of one's ideas and values, indicating the way people see themselves and want to be seen by others. In this vein, home relates to the ability to act upon and modify one's dwelling - the home-making process. Home provides a setting for a sense of achievement, a place for self-expression, or freedom of action. Home is also about temporal dimension; permanence and continuity are important. Home can be a place of memories or a place, which over time, becomes 'intimately familiar'. Home is furthermore a place for relationships with family and friends. The social level of home has sometimes misleadingly been interpreted as a place for family even though home may embrace many other important social ties, as well. Regardless of the household combination, home is perceived as the locus of intense emotional experiences, and as a place that provides an atmosphere of social understanding where one's actions, opinions, and moods are accepted. Ideas such as a place to share with others, to entertain with relatives and friends, and to raise children, are all related to this dimension. Home is also a centre of activities, which may be allied to simple physiological needs such as eating, or they may support other activities, such as work or sports. Along with activities, home is also an indicator of personal status; for many, the home reflects one's economic status. Thus, the material structure of the home matters. It indicates that home is a combination of design

elements and material; in other words, material structure underlines both the physical attributes of the dwelling as well as its aesthetic features. In addition, since the home as an idea entails the environment, the physical characteristics of the surroundings and the neighbourhood are also essential. But most of all, home is seen as a refuge from the outside world. This identification gives the sense of one's need for privacy and independence. According to Després, indeed, home needs to provide a sense of security and control.

The notions reinforce the multifaceted nature of home. But they also underpin the meaning of home as a subjective matter as residents tend to place different values on different dimensions. Coolen (2008), who has scrutinized the meaning of dwelling attributes in terms of values, identified parallel categories just as Després did. Examining the meaning of dwelling features, Coolen acknowledged values that incorporate high-level and middle-level meanings, such as self-direction and privacy. However, the dwelling and the meaning of home are not synonymous. The analogy suggests instead that there is a link between a house and a home. Thus, whilst a person is choosing a house to dwell in, some aspects of that house may already indicate how effective the home-making process can be. These aspects are essential for a designer and a planner to understand.

From housing preferences to the home-making process

Before one can make a house into a home, one must choose the house. This underlines the importance of housing choice determinants. Housing choices are studied as housing preferences, although studies of housing preferences often have portrayed a situation where stated and revealed preferences are in conflict (Vasanen, 2012; Timmermans et al., 1992; Coolen and Hoekstra, 2001). Stated preferences, the outspoken residential wishes and wants, do not necessarily meet the revealed preferences, which are the ones representing their actual behaviour in choosing a house. For example, Asukasbarometri 2010 (*Finnish residential barometer 2010*) indicates that 55% of respondents would prefer a single-family house, as an ideal form of housing (Strandell, 2011). Of these respondents, however, only 34% were currently living in such a house. Still, on average, the respondents gave fairly good ratings for their current dwellings (8.3/10), suggesting that preference studies do not automatically reveal the true aspirations, especially if a more detailed understanding is not directed towards dwelling features. The same applies to townhouse understanding.

The majority of housing-preference research studies have underpinned the functional determinants of dwellings (cf. Sirgy, Grezeskowiak and Su, 2005). However, if the house is more than just an investment object, it must be considered an object for a home-making process, as well. Paadam explains the time factor as important, embracing households' changing needs and preferences:

The suitability of housing for home creation for different individuals and families with various needs and preferences, appearing and changing during their lives, is of considerable significance (Paadam, 2003, 53).

The notion highlights the need for compatibility between house and home. From this understanding, it is important to grasp that home is achieved through a process. Home is loaded with expectations and often, symbolic and culturally interwoven hopes, even unconscious ones. Indeed, it is difficult to explain the reasons for one to choose a particular house and to identify where the potential of changing a dwelling into a home actually lies.

The research about the meaning of home has offered some interpretations, such as the importance of privacy, security and control. In addition, Dovey (1985) explains that home entails spatial order, encompassing also sociocultural and temporal levels. The spatial order refers to the home as a sacred and secure place, a demarcated territory encompassing both physical and symbolic boundaries; the boundaries are to control the access and the behaviour of oneself and of others. Temporal level indicates practices and experience, as well as familiarity. The patterns of behaviour are also a question

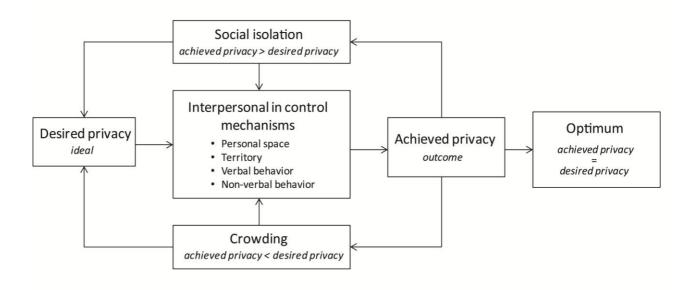


Figure 1. Balancing the privacy. Source: Altman (1975)

of sociocultural order. Social practices may demand specific environmental behaviours. For these behaviours, Altman (1975) provides an interpretation that is shown in Figure 1.

Altman's basic assumption is that we all have our own individual need for privacy, which, in turn, affects our environmental behaviour. If we are not able to obtain a desired level of privacy, we are to change our behaviour, either voluntarily or involuntarily.

Combining the meaning of home and housing preferences for small-scale living – the missing piece

Despite the widespread interest that the home-making process and the home as a concept have aroused, an important piece seems to be missing. The majority of people in Western culture prefer a home with a garden (Rapoport, 2005; Strandell, 2011). This is especially because gardens have been portrayed as places of intimacy and self-expression, but also as places of social encounters (Bhatti, 2006). These are all aspects of home as described by Després. Therefore, it is surprising that, with only few exceptions, gardens have been widely ignored in home-related research (Bhatti, 2006; Bhatti and Church, 2004). Still, gardens and yards may indeed have significant importance in relation to home creation:

The home and consequently the garden should be treated as fluid in terms of its meanings and boundaries and offering multiple social possibilities... Such an approach allows for the garden to have a distinctive role in home-making. (Bhatti and Church, 2004, 369)

Bhatti and Church well explain the central role that gardens may have as a territorial design element, especially considering the home-making process. Nonetheless, in previous studies gardens and parks have been mainly discussed in the context of well-being and community gardens (Comstock et al., 2010; Ulrich, 1999) or as ecological mediator (Nassauer, Wang and Dayrell, 2009). However, regarding the theme of privacy, gardens may play an important role. Gardens are especially interesting as a central element of townhouses. Therefore, in this study the approach to the home-making process is reflected through the yards and the gardens, which indeed are considered important attributes for both territorial behaviour and townhouse-related living.

Aims and methods: researching the residential experience

This article aims to explain garden essentials as part of townhouse-related living, examined through the home-making process. The aim requires the identification of residential behaviour, the ways people perceive their domestic outdoor environment. The evaluation is conducted through short analyses of gardens and front yards offering podiums for residential behaviour. Reflecting both quantitative and qualitative data, individual experiences are to provide understanding about the process of shifting from expectations to experiences, from houses to homes. In this article, the research setting is intended to make the most of a versatile dataset at hand, and thus to explain *in what ways residents experience the home-making process in townhouse-related housing settings*, whilst focusing on the yards and gardens. Moreover, using both survey and interview based dataset, individual statements are possible to reflect through a more extensive, quantified data. Thus, individual remarks have strong validation.

Housing choices and home-making are complicated and longstanding processes, more than just a mere snapshot of a specific situation. The Finnish Dream Home survey, conducted in 2014, provides an overall understanding of residential attitudes and expectations, in a dense urban setting. The second dataset is collected during 2007-2010, as part of the "Housing preferences, sustainable urban structure and everyday life" survey, funded by the Ministry of Environment. The preference study is relatively extensive in terms of home-making process examination, and thus included in this paper. The third dataset is a follow-up to the "Housing preference" research project, as part of the URBA project conducted in 2009-2010.

Three projects

The Finnish Dream Home (FDH) survey is a part of the Habitat Components Townhouse, currently executed along with the AEF Energy Efficient Townhouse research project, at Aalto University. The research setting aims at developing a concept of an energy-efficient townhouse suitable to the Finnish context. The purpose of the FDH survey is to investigate residents' housing preferences and attitudes towards housing design options that are related to the townhouse typology. The web-based survey, Finnish Dream Home, was conducted in January and February 2014. The survey utilized web panels, using a stratified sampling collecting a total of 1,214 respondents. According to the survey, a total of 56% of those surveyed considered a townhouse as a possible housing solution for their own household. The interest was equivalent amongst solo dwellers, couples and families with children (Hasu, Tervo and Hirvonen, 2014).

Accordingly, in order to gain a comprehensive understanding about the user experience, qualitative, interview-based data are included (cf. Creswell, 2009). Within the project "Housing preferences, sustainable urban structure and everyday life" several subprojects were executed. The author conducted a total of 49 household interviews in 2007 and 2008, in the Helsinki metropolitan region, including one in-depth interview in Vuorenjuuri, a townhouse block in Helsinki. The in-depth interview approach embraced themes including housing histories, recognition of roles of household members during the housing choice process, home-making process and ways to use the residential environment. In 17 of the "Housing preference" in-depth interviews, a map-based analysis was included (Hasu, 2009). Thus, in addition to the aforementioned themes, the residents were asked to deliver an interpretation of their home territories in terms of different levels of privacy.

Finally, due to the interest aroused by the Vuorenjuuri interview, additional material was collected in 2009 and 2010 as part of the wider URBA project (Mälkki, 2010). During the project, the author conducted a supplementary group interview in Vuorenjuuri townhouse block, with a total of four participating households (eight persons). The main purpose was to understand the ways townhouse design solutions were experienced and further, the ways the home-making processes were conducted.

The aforementioned datasets provide thorough information about the residents' experiences and interpretations of their home environment and spatial homemaking process in a dense, small-scale living context. The information is reflected in this article, providing a hierarchical analysis of townhouse-related domestic space in two examples, Hansarinne (Espoo) and Vuorenjuuri (Helsinki), interpreted as part of the home-making process.

Results: interpreting the home-making process

As the meaning of home well indicates, the sense of governance, feeling secure and in control, is important. In this context, sense of privacy is vital. The Finnish Dream Home survey confirms the notion, even in dense settings. The FDH respondents prefer highly home-related privacy. A total of 84% considered the statement "Street pedestrians should not be able to see into my home" as very or rather important. Nonetheless, the preference for privacy in the garden was even more surprising. A total of 83% considered the privacy provided in the garden as very or rather important. More specifically, of the townhouse-minded informants a total of 87%, and of the non-townhouse minded a total of 83%, valued garden-related privacy.

Table 1 clearly indicates that the respondents, of whom the majority were in downtown Helsinki or situated in a nearby suburb, highly prefer privacy. In this respect, it is still important to notice that the preference for privacy does not necessarily require distance from the neighbours. Altogether 23% considered the statement "no neighbouring building attached" as "not important", suggesting an approval for close neighbours. However, the majority would appreciate detached housing, thus suggesting the need to feel control. On the other hand, the preference underlines the role of housing design and urban planning: it is important to understand the role of design solutions to promote sense of governance and privacy. What is more, the most controversial opinions were found in relation to the small front yards. Altogether 38% of respondents found a small front yard facing the street "not important" whilst only 10% indicated the front yard as "very important". In the light of this survey, one could easily argue that small yards are hardly appreciated. That would be a false interpretation, however, as explained next.

Table 1. Attitudes towards housing facing a street. Finnish Dream Home survey (n=1214). Respondents considered privacy as very or rather important, both regarding the housing interiors and exteriors.

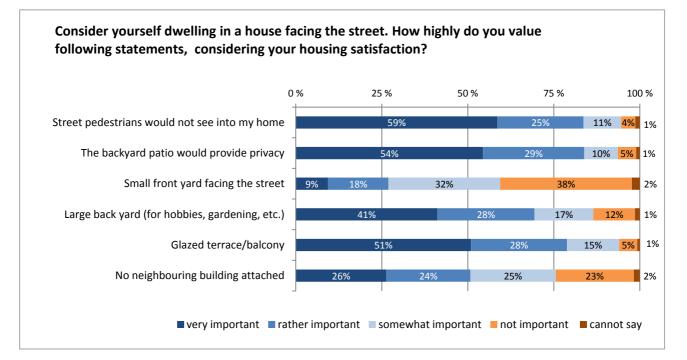






Figure 2. Hansarinne in Kauklahti, Espoo

Figure 3. Vuorenjuuri in Malminkartano, Figure 4. Säterinmetsä in Leppävaara, Helsinki Espoo

Spatial hierarchy: privacy and home-making process

The spatial hierarchy examination presents two examples. The first, Hansarinne, is situated in Kauklahti, Espoo, next to Helsinki. In this case, urban planning was the level to dictate the frames for the housing design, not the housing design itself. The local detailed plan defined the position of building masses, with an aim to create clearly defined street space with the curving facades. The row of houses was thus squeezed between the street and the hill climbing north-west, in the backyard. Small gardens and car parking were placed behind the houses (Figure 2, see also Figure 8). The second example, Vuorenjuuri townhouses, located in Helsinki, is a setting of three blocks combining altogether 20 houses, built mainly by the current residents and presenting the more traditional townhouse setting, with a house ownership (Figure 3). For comparison, a third townhouse block setting is presented, Säterinmetsä in Espoo (Figure 4).

In the Hansarinne case, the housing block represents a common administrative form in Finland, a limited housing company (Figure 5). Even though traditionally, townhouses are privately owned houses, an example discussing a housing company in this context is justified. In the FDH survey, over half of respondents considered a townhouse as a very suitable or suitable form of housing. Of these "townhouse-minded" respondents, 80% considered a housing company as a possible form of housing.

Figure 5. Hansarinne housing company. A central part of the Finnish housing system is the limitedliability shareholders' housing companies. A housing company (similar to a housing cooperative) is a legal entity that owns one or more residential buildings. Finnish housing companies are generally incorporated as non-profit, limited-liability companies. The housing company is owned and managed by the residents. The obligation to ensure proper maintenance of the buildings and apartments is shared between the housing company and its shareholders (Expat, 2012). Each share in a housing company, exclusively or alongside others, bears the right to govern the apartments, or any other part of the building owned by the housing company, as determined in the articles of association of the said housing company (FINLEX).





Figure 6. Hansarinne spatial hierarchy: the planning approach. The interpretation is the author's, based on the planning understanding.



Figure 7. Hansarinne spatial hierarchy: the residential experience. The interpretation is the author's, based on the residents' interviews and map-based analysis, provided by the residents.

Scrutinizing the meaning of home and the home-making process first from the planning perspective (Figure 6), the dwelling is considered the most private territory, and the immediate outdoor spaces, the garden and the front yard, are semi-private spaces governed by the individual residents. The semi-public space is used to describe the shared spaces of the housing company. The public space reflects the understanding of places and spaces that are accessible to the majority of the residents and city users, such as streets, parks, and squares.

In everyday life experiences, however, the hierarchical notions were not as clearly defined nor experienced. As a point of evidence, the residents' experiences based on the interviews and map analysis are presented in Figure 7. The illustration reveals mixed interpretations. The reasons for the differences are various. First of all, expectations differed considerably between different dwellers; the reasons for choosing Hansarinne dwellings were not similar amongst the residents. For some, the housing type was interpreted to offer neighbourliness and thus, togetherness. In other words, a form of housing where common agreements offer a solid ground for social encounters. A housing board member described the common aims using gardens as an example:

Of course you can use it (the garden), you are allowed to be there. Of course no flower planting, though. It is because of this common... you know, that everything would look harmonious. Since, you know, not all of us share the same taste. (KW50)

Others, instead, expected to be able to use their own yard and garden as they had previously done: to dig into the earth and to plant vegetation based on personal choices.



Figure 8 (left). Hansarinne parking space facing private gardens.

Figures 9 and 10. The small gardens. The small gardens are highly appreciated by the residents but the level of privacy is minimal. In other words, they were expecting a certain lifestyle from the townhouse scenario. Due to the decisions made by the housing board, some of the inhabitants experienced dissonance between expectations and experienced reality:

Q: When you think about this apartment, how do you find the external spaces-how are they connected?

A: Well, not that connected. We don't even have a garden. I think it is outrageous....The realtor said that there is a garden attached. I could plant there whatever I would want to. But I was not allowed. (KW48)

This interpretation presents the conflicting expectations and outcomes (Figures 6 and 7), between both the residents themselves and the residents and planners. The apartments opened to the backyards, offering a small terrace with a small area of lawn (Figures 9 and 10). However, these small spaces exposed differing expectations and interpretations of acceptable ways of using that space. One striking flaw was that a housing maintenance company was responsible for the semi-private lawn area. The arrangement decided by the housing company board resulted in easy-care and a harmonious looking garden. However, in order to enable the maintenance company to work without distractions, no gardening was allowed; even flowers planted in pots were forbidden. For residents who were not members of the board, the decision was difficult to grasp, and it affected the interpretations of the spatial governance – and neighbour relationships. Apparently, their inability to decide about personal small gardens raised distrust amongst the residents.

A similar collision of expectations and planning outcomes was detected in front of the Hansarinne building. Even though the FDH survey suggested that the residents were not particularly interested in small front yards (Table 1), the affordances were detected among those living in the situation. In the Hansarinne case, the residents did pay attention to the entrance arrangements only after moving in. This is an especially important notion whilst assessing the home-making process. Since a house is a vast bundle of versatile attributes, people are seldom able to take into account all relevant factors prior to moving. Many factors that seem unimportant during the choice process might well be experienced as extremely important during the home-making process. In this case, a respondent had grown to realise the value of the front yard of the house, but was not able to make the most of it:

You know, I'd like to have this place (front of the house), like in Central-Europe. I'd like to put flowers here. But how long would they be there? I'd like to have a small table and a chair. I could sit there and watch people passing by. I should be able to do that. (KW48)



Figure 11. Vuorenjuuri spatial hierarchy: the planning approach. The interpretation is the author's, based on the planning understanding.



Figure 12. Vuorenjuuri spatial hierarchy: the residential experience. The interpretation is the author's, based on the residents' interviews and reflection to previous material, including Hansarinne.

But she could not. The resident well identified the affordances, but was not able to execute her plans due to the narrowness of the place in front of the house. A narrow "buffer zone" between the building and the street diminished the sense of privacy, control and security. In addition, the residents were not able to personalise the entrance, thus losing the opportunity to boost the home-making process.

Moreover, the Hansarinne-apartments were originally designed to offer working space on the ground floor, with a window view opening to the street. By realtors, the space was marketed as a flexible space, suitable to use as a TV-room or a bedroom. The ground-floor design offering several possible uses is indeed an oft-reoccurring theme, since flexibility is interwoven especially with the townhouse concept. However, if a resident had changed the ground-floor room to a bedroom, it was experienced as neither private nor secure. First of all, due to the narrow buffer zone between the building and the street, the pedestrians were able to see straight in. The closeness to the street level was experienced as unsafe:

Thinking about the home environment, I think I should be able to feel safety and security. I don't find that coming true. When a group of people are walking by, in the middle of the night and shouting like monkeys, as it happens, we can hear it all around our apartment. It comes through that downstairs window. That room, in specific, feels unsafe. You know, some lunatic could just break the window and jump in. (KW48)

Comparing the sense of home, the aspects of governance and security, privacy and possibilities for personalization, well revealed the different stances amongst different residents. If residents did not feel a balance with their desired level of privacy, the dwelling was more likely to remain as an apartment than be processed into a home. The situation with the home-making process and the sense of home was different in Vuorenjuuri, where residents were able to decide on the governance of their domestic space. In this setting, the importance of the garden was also pinpointed simultaneously by the residents.



Figures 13 and 14. Vuorenjuuri spatial hierarchy: the backyards facing the public spaces. The residents were not provided any specific guidance in what ways to design or maintain the public space. If residents consider their home extending to the public area, they are more likely to take care of the area (Figure 13). Also, the size of the buffer zone matters, which is here the lawn area between the path and the fences.

Well, of course, most important is that one feels the place is home. If I didn't have that feeling, all would be the same. As a matter of fact, the garden is one thing that matters actually a lot. I love to dig the earth, to design and to make the garden. Bit by bit, to try that and everything. And to plant all again tomorrow. (VW51)

In the Vuorenjuuri case, even though the plots were rented from Helsinki city, the residents were able to rule their own gardens, which directly affected their sense of home. The home-making process was also conceived as effective since the neighbourhood started to take shape during the building process. But even here some problems occurred, especially related to the gardens and aspects of privacy (Figures 11 and 12). For the latter, the residents wondered why the garden storehouse was not used as a barrier between the public spaces, opening up behind the row of townhouse gardens. As one resident explained, the storage provided more privacy in Säterinmetsä (Figure 4):

(Man): In my opinion, good planning provides for dense surroundings, still without any problems caused to the residents. Maybe grilling will cause some problems, with all the smell and noises. (Woman): But, since we neighbours know each other, I don't think we'll have any major problems... Although, townhouses in Säterinmetsä have it better, they were allowed to build their storages in the back of their garden, parallel to the backline. I would have like to have the same way here. In that way our gardens would have been more private. People walking along that path, behind our fences - they see straight in. But we've grown accustomed to it. Although, after the sauna... when sitting there, in the patio, I feel a bit naked. But one gets used to it. (VW52)

Thus, even in this case where the residents had designed their own homes, or had taken an active part in the design process, not all of the design solutions served the home-making process. On the other hand, the residents liked the idea of having a separate sauna and a possibility to cool off afterwards on the garden patio. But on the other hand, this habit required them to adapt to a lesser level of privacy.

Other aspects of privacy were also questioned. The Vuorenjuuri gardens opened up into public space, where a pedestrian path was undulating along the row of gardens. A clear problem detected in the hierarchical examination, according to the residents, was that the access between the gardens and the public space was in nobody's interest. Residents had built different kinds of "bridges" over the small ditch in order to connect the garden to the undulating path leading to a nearby grocery store. The area between the backyard fences and the path was dishevelled and weedy. The city had offered as a solution that the residents could rent the land in order to take care of it, and accordingly they would be able to plant some vegetation in that area. But the residents wondered



Figures 15 and 16. Vuorenjuuri (left) and Hansarinne (right) front yards facing the public spaces. In Vuorenjuuri, every house has a small front yard creating a buffer zone with functional aspects. In Hansarinne, the buffer zone between private dwellings and public street is minimal. Additionally, the entrance does not offer any possibility for personalization. about the logic of this solution: Why would they need to pay rent for taking care of the public land area? Instead, residents adopted diverse behaviours, as shown in Figures 13 and 14. Those who had a broader buffer zone between the path and the garden, were more likely to take care of the space behind the garden. The situation was opposite with residents with a narrow buffer zone.

Nonetheless, despite some eclipses in the planning procedure (Malminkartanon pientalot, 2005), the residents were content with their townhouses. Regarding gardens and front yards, the residents' experience was, though, that the gardens with a depth of 10 meters were suitable for smaller households, but families with children would probably want - or need - a larger garden. In fact, children living in the nearby high-rise apartment blocks were not always welcomed to small townhouse gardens. For children, only playgrounds were located in private gardens, with a limited space. An area that invites families with children challenges the spatial hierarchy:

Q: What kind of social intercourse you have with the people living other side of the street?

A(man): The children play with each other... or used to. A(woman): Yes... And those we see most often, them we say hello to... Some of the parents to the smallest children sit there, in their courtyard. There are some benches. But it's kind of a strict border, their side and our side. A mental border. And some of the parents here, they didn't allow their children to go to the courtyard, other side of the street. Maybe it's because in the beginning, when we didn't have fences, kids run all around. Then they were forbidden, to run around. So maybe then, everyone thought that it's better to stay in one's own place. (VW52)

In the Vuorenjuuri case, one solution would have been a semi-public place for playing, near the townhouse row, for all the children in the neighbourhood. A public playground would have invited the children, regardless of the "mental barriers" experienced by the adults. Since some neighbours experienced children playing on the other side of the fence as too loud, a separate playing area would have offered more relaxation to adult residents.

Along with the garden, the front yards were perceived as very important, both in terms of privacy but also regarding functionality. The front area provided a place for piling snow in the winter time; in addition to that one was able to keep the car and the bicycles in the front of the house (Figure 15). Moreover, the residents appreciated the uniform instructions they had received from Helsinki city with regard to the planting, which was opposite to the Hansarinne case. The difference between these two places was, thus, that for the first, Vuorenjuuri residents were informed about the aim of the uniform planting in advance, while Hansarinne residents were instructed by the housing board only afterwards. Even more importantly, the Vuorenjuuri residents had one area, their own back gardens to design and to use as each and everyone wanted. In Hansarinne, the residents had no such area. Only the members of the housing board were able

to make decisions about the dwelling related gardens. Additionally, decisions concerning front space were conducted way before housing design or residential involvement, by the city planners (Figure 16).

The residents in Vuorenjuuri described feeling comfortable and at home, although one of the group-interviewed couples would have appreciated their own detached house, but still felt Vuorenjuuri was a good compromise. The others, however, described the current housing as optimal for their situation. Life and home were described as safe and secure. Neighbours were near, but without sacrificing privacy or self-governance.

Discussion

In the literature review, Altman's approach to privacy explains well the conflicts detected in the Hansarinne case, where the aspects of governance were related to the perceived level of privacy and control. The housing board deciding on the rules was interpreted as their "watching what you are doing in your own home." Thus, residents may decide not to have anything to do with any of the neighbours, further diminishing the sense of home, as had happened in Hansarinne. For the Vuorenjuuri example, on the other hand, knowing one's neighbours created a sense of security and safety, which is in line with the meaning of home. These residents felt more secure knowing their neighbours – the home-making process was boosted.

In the Hansarinne case, the lack of privacy as well as inadequate possibilities to govern the private spaces related to home were experienced as major negative factors, delaying the residents' home-making process. According to Després' categorization of the meaning of home, home should be a place for cherishing social relationships, as well as a place to feel secure and in control. Home should reflect one's ideas and values, and it should provide a place for one's activities, even including giving one's personal touch, for example in the form of gardening. In the case of Hansarinne, none of these aspects were guaranteed. Eventually, houses with too petite gardens caused negative outcomes such as conflicts with the neighbourhood or withdrawal from social relationships. Lack of privacy was related to the size of the backyard but also to the design of the entrance, in addition to the window views and size of the buffer zones. One of the main challenges was the bedroom, originally designed for a home office space, situated next to the street without an adequate buffer zone. And yet, the modification and flexible use of the ground level space is offered as one of the core design principles of the townhouse concept.

Home-making process and the extended home

According to the interview data, the home is not only the house or the apartment. It is also the external places, such as gardens and front yards. In this sense, one could discuss an extended home, which in its basic meaning would embrace the dwelling and the yard, the domestic space that one is to grow to feel attached to, and to use as elements in the home-making process. In this respect, according to Bhatti and Church (2004), the home-making process is based on:

a range of regularised social practices that enhance personal and group identities... [that] contribute to the social and spatial orderings that structure the key meanings of home in relation to privacy, security, family/kinship, leisure, house space/design, and ownership. (Bhatti and Church, 2004, 369)

Based on the interviews for this article, the argument has been proven to be very true. The home as such is a place of security and a place to make one's own. This said, home-making seems more probable if one is able to govern one's own domestic spaces - the extended home. Terkenli (1995) has discussed the expansion of home, referring to home as a region. With regard to the home-making process, an extended home is a concept that integrates the house and gardens, as well as the governance of that domestic space. As such, the idea of the extended home underpins the importance of the design solutions, both on the level of urban planning and on the level of housing

design. The Hansarinne case is an example where urban planning dictates the possibilities for residential governance. Residents who felt unable to extend their home to the garden experienced themselves, more or less, as bystanders. In Vuorenjuuri, the situation was partially similar since many aspects of privacy and governance were related to the spatial hierarchy provided by the local detailed plan. In both cases, a better understanding of residential behaviour, need for spatial governance and home-making would have suggested alternative design solutions and possibly, a local plan that would have left more possibilities for housing design, including the gardens and yards.

The idea of the extended home underpins the importance of the design solutions, both on the level of urban planning and on the level of housing design. A common feature for all the residents participating in the interview studies in Hansarinne and to some extent Vuorenjuuri, was that residents were not able to conceive all of the relevant aspects related to their new home environments, especially concerning their need for everyday practices. It seems that habitually the true nature of the extended home is revealed only later, during the time of residence. In that sense, one could argue that the residents only realise their needs for the extended home through the home-making process.

A propos the home making-process, the unmet expectations did influence the ways the residents perceived their homes. Occasionally, those who felt unable to personalize their extended home, even used the word "apartment" rather than "home." In addition to the choice of words, the residents sought different ways to cope with the situations where expectations and reality did not meet. In connection with this, Altman suggests that people seek a balance with the desired and achieved level of privacy. If the balance requirement is not met, people might behave either aggressively or they might withdraw from neighbourhood contacts (Reagozci, 2003), which was recognizable in Hansarinne. As a consequence, the social connections were not developed, contrary to the planning objectives (Kauklahti loppuraportti, 2006).

The residents in Hansarinne who felt the greatest discrepancy between the desired and the perceived level of privacy, were the ones most unsatisfied with their housing. Accordingly, they described the possibility of moving in forthcoming years and did not find any reason to join the community, affirming the notion of withdrawing behaviour. Thus, some of the inhabitants withdrew into their dwellings, as the exteriors did not provide the desired feeling of home. For the residents, first and foremost, the question was of unachieved privacy and thus, a narrowed sense of home.

An obvious gap between housing preferences and reality was hence detected. Bearing in mind AEF's goal, to design a set of different townhouse concepts for different residential profiles, gardens and front yards play a central role. Even in a denser context, only a minority are willing to forfeit their own privacy. Thus, an idea of using townhouses as an element to enrich high-rise blocks seems questionable if aspects of privacy and governance are ignored. In other words, it is difficult to reach potential residents who are willing to live in a townhouse surrounded by apartment buildings, in an extended home without privacy. One of the Vuorenjuuri residents expressed this sentiment thus:

Even though these townhouses have small plots, and gardens, at least they provide privacy.... While looking for a place to dwell, we saw many plots meant for infill building - in such cases, we always had a feeling of being in somebody's backyard. (VGW3)

Conclusion

This article has shed light on townhouse-related living and identified aspects of privacy, examining the gardens and front yards as part of the home-making process; the process was visualized in a form of spatial hierarchical analysis. The analysis indicated that planners' and residents' perceptions about levels of privacy are divergent. In-depth interviews combined with hierarchical analysis revealed also dissimilarity between the spatial interpretations, as explained by different households.

As long as home-choosers are not able to recognize all of the relevant factors affecting their housing satisfaction, it is the planners' and designers' responsibility to evaluate the possibilities for home-making processes. Townhouse is a housing typology that in the future is expected to fulfil many residents' housing preferences in the Helsinki region. This implies that the concept must serve a heterogeneous mixture of people in different life stages and lifestyles, embracing a variety of housing histories, expectations, values, attitudes, and so forth. Dense townhouse blocks offer only a limited amount of home exteriors, such as balconies, gardens and eventual front yards. Whether the block is arranged as a housing company or as a row of individually owned houses is a matter of interest. However, despite the form of tenure, all inhabitants have a need for the home-making process, and creating the sense of home. When the extended home is inadequate to serve the home-making process, many feel that they are not entitled to use their homes as they would have wanted to. Such an outcome can be avoided if housing design and urban planning pay more attention to the extended home and the individual need for privacy. In other words, governance of the extended home does matter.

The future analysis of the FDH survey will shed more light on the different residential groups and their preferences for diverse townhouse typologies, including the need for privacy. Thus, future research will examine design approaches to the extended townhouse homes, in relation to different neighbourhood compositions and spatial hierarchies.

Acknowledgements

The author would like to thank the three anonymous reviewers for their comments and suggestions that helped to improve and clarify the manuscript.

References

AEF 2014. Energy-efficient townhouse. Available at: http://energyefficiency.aalto.fi/en/research/townhouse/ [Accessed 18 May 2014].

Æro, T. 2006, "Residential Choice from a Lifestyle Perspective", *Housing, Theory and Society*, vol. 23, no. 2, pp.109-130.

Altman, I. 1975. *The environment and social behaviour. Privacy, personal space, territory, crowding.* Monterey, CA: Brooks/Cole Publishing Company.

Annison, J.E. 2000, "Towards a clearer understanding of the meaning of "home"." *Journal of Intellectual & Developmental Disability*, vol. 25, no. 4, pp. 251-62.

Bhatti, M. 2006, ""When I'm in the garden I can create my own paradise": Homes and gardens in later life", *The Sociological Review*, vol. 54, no. 2, pp. 318-341.

Bhatti, M. & Church, A. 2004, "Cultivating Natures: Homes and Gardens in Late Modernity", *Sociology*, vol. 35, pp. 365-383.

Comstock, N., Dickinson, L.M., Marshall, J.A., Soobader, M-J., Turbin, M.S. Buchenau, M. & Litt, J.S. 2010, "Neighborhood attachment and its correlates: Exploring neighborhood conditions, collective efficacy and gardening", *Journal of Environmental Psychology*, vol. 30, no. 4, pp. 435-442.

Coolen, H. & Hoekstra, J. 2001, "Values as determinants of preferences for housing attributes", *Journal of Housing and the Built Environment*, vol. 16, pp. 285-306.

Coolen, H. 2008. *The meaning of dwelling features. Conceptual and methodological issues.* Delft University of Technology, Amsterdam: IOS Press.

Creswell, J. W. 2009. *Research design. Qualitative, quantitative, and mixed method approaches,* 3rd ed. Thousand Oaks, CA: SAGE Publications.

Dovey, K. Home and homelessness. In: I. Altman & C.M. Werner, eds. 1985. *Home Environments*. New York & London: Plenum Press.

Ellilä, E. 2014. Herenhuisesta kaupunkitaloksi. Master's thesis. Aalto University, Department of Architecture.

Evan, A. & Unsworth, R. 2012, "Housing Densities and Consumer Choice", *Urban Studies*, vol. 49, no. 6, pp. 1163-1177.

Expat 2012. Information about Finnish Housing companies. Available at http://www.expat-finland.com/housing/housing_and_utilities.html [Accessed 18 May 2014].

FINLEX. *Law of Housing Companies*, 2009/1559. Available at: http://www.finlex.fi/fi/laki/ajantasa/2009/20091599 [Accessed 12 August 2013].

Fogelholm, K. 2003. *Espoon Säterinmetsä: tutkimus yhteenkytkettyjen omakotitalojen rakentamisesta*. Ympäristöministeriö. Rakennustieto, Tampere: Tammer-paino.

Hasu, E., Tervo, A. & Hirvonen, J. Townhouse - unelmakoti. In: Kuittinen, M. ed. 2014. *Aalto-yliopiston Energiatehokas townhouse -tutkimushankkeen vuosiraportti 2014*. Aalto-yliopisto. Helsinki: Picascript.

Hasu, E. Kaupunkitalo - asukasunelmia ja todellisuutta. Malminkartanon Vuorenjuuren asukaskokemuksia. In: Norvasuo, M. ed. 2010. *Asutaan urbaanisti! Laadukkaaseen kaupunkiasumiseen yhteisellä kehittelyllä.* Yhdyskuntasuunnittelun tutkimus- ja koulutuskeskuksen julkaisuja B 99. Espoo: Yliopistopaino.

Hasu, E. 2009. Koti pihalla. Kodin ulkotilat yksityisestä julkiseen. Asukkaiden kokemuksia asumisesta ja asumisen laadusta. Masters. Department of Architecture, Helsinki University of Technology.

HS. Kalasataman kallis pientalorivi muuttuu kerrostaloksi. *Helsingin Sanomat* 1.4.2014.

Hämäläinen, T. 2013. *Why townhouses? A comparative study of emerging housing concepts in Helsinki and Stockholm*. Masters. Vrije Universiteit Brussel. Available at: https://theportfolium.com/portfolium/2013/9/11/Timo-Hamalainen/MASTERS-THESIS [Accessed 20 May 2014].

Kauklahti loppuraportti 2006. Available at http://www.asuntomessut.fi/sites/default/files/loppuraportti_espoo.pdf [Accessed 20 May 2014].

Jalkanen, R., Haapanen, S., Helander, H., Hellman, P., Koponen, R., Levanto, R., Manninen, R., Pulkkinen, S., Siivola, M. & Saarikko, T. eds. 2012. *Townhouse-rakentaminen Helsingissä*. Helsingin kaupunkisuunnitteluviraston julkaisuja 2012.

Lapintie, K. 2010, "Intohimon hämärä kohde. Mitä asukas haluaa?", *Yhdyskuntasuunnittelu*, vol. 48, no. 2, pp. 41-57.

Mallet, S. 2004, "Understanding home: a critical review of the literature", *The Sociological Review*, vol. 52, no. 1, pp. 62-89.

Malminkartanon pientalot 2005. Projektin kokemukset ja johtopäätökset. Helsingin kaupungin kiinteistövirasto. Tonttiosasto.

Manninen, R. & Holopainen, T. 2006. Townhouse. Kytketty omatonttinen pientalo kaupungissa. Lähtökohtia ja tavoitteita. Helsingin kaupunkisuunnitteluviraston yleissuunnitteluosaston selvityksiä 8. Available at: http://www.hel.fi/hel2/ksv/julkaisut/yos_2006-8.pdf [Accessed 20 May 2014].

Marcus, C. C. 1995. *House as a mirror of self: exploring the deeper meaning of home*. Berkeley, CA: Conari Press.

Moore, J. 2000, "Placing Home in the Context", *Journal of Environmental Psychology*, vol. 20, no. 3, pp. 207-217.

Mälkki, M. Kytketyt kaupunkipientalot ja urbaani rakentaminen. In: Norvasuo, M. ed. 2010. *Asutaan urbaanisti! Laadukkaaseen kaupunkiasumiseen yhteisellä kehittelyllä.* Yhdyskuntasuunnittelun tutkimus- ja koulutuskeskuksen julkaisuja B 99. Espoo: Yliopistopaino.

Nassauer, J.I., Wang, Z. & Dayrell, E. 2009, "What will the neighbors think? Cultural norms and ecological design", *Landscape and Urban Planning*, vol. 92, no. 3-4, pp. 282–292.

Paadam, K. 2003. Constructing residence as home: homeowners and their housing histories. Ph.D. Tallinn Pedagogical University.

Rapoport, A. 2005. *Culture, architecture, and design*. Chicago, IL: Locke Science Publishing Company, Inc.

Reagozci, W.C. 2003, "When context matters: a multilevel analysis of household and neighbourhood crowding on aggression and withdrawal", *Journal of Environmental Psychology*, vol. 23, no. 4, pp. 457-470.

Saarelainen, E. 2010. *Helsinki townhouse - saavutettavuus kaupunkipientalossa.* Masters. Tampereen teknillinen yliopisto.

Sirgy, J.M., Grezeskowiak, S. & Su, C. 2005, "Explaining housing preference and choice. The role of self-congruity and functional congruity", *Journal of Housing and the Built Environment*, vol. 20, no. 4, pp. 329-347.

Sixsmith, J. 1986, "The meaning of home: an exploratory study of environmental experience", *Journal of Environmental Psychology*, vol. 6, no. 4, pp. 281-298.

Smith, S. 1994a, "The essential qualities of a home", *Journal of Environmental Psychology*, vol. 14, no. 1, pp. 31-46.

Smith, S. 1994b, "The psychological construction of home life", *Journal of Environmental Psychology*, vol. 14, no. 2, pp. 125-136.

Somerville, P. 1997, "The social construction of home", *Journal of Architectural and Planning Research*, vol. 14, no. 3, pp. 227-245.

Strandell, A. 2011. Asukasbarometri 2010 – asukaskysely suomalaisista asuinympäristöistä. Suomen ympäristö 31/2011. Helsinki: Edita Prima Oy.

Terkenli, T.S. 1995, "Home as a region", *Geographical Review*, vol. 85, no. 3, pp. 324-334.

Timmermans, H., Borgers, A., van Dijk, J. & Oppewal, H. 1992, "Residential choice behaviour of dual earner households: a decompositional joint choice model", *Environment and Planning A*, vol. 24, no. 4, pp. 517-533.

Tognoli, J. Residential environments. In: D. Stokols & I. Altman eds. 1987. *Handbook of environmental psychology*. Vol. 1. New York: John Wiley & Sons, Inc.

Ullrich, T. 2014. Saksalainen kytketty kaupunkipientalo inspiraation lähteenä. Masters. Aalto University.

Ulrich, RS. Effects of Gardens on Health Outcomes: Theory and Research. In: Marcus C.C. & Barnes M. eds. 1999. Healing Gardens. Therapeutic Benefits and Design Recommendations. New York: John Wiley & Sons.

Vasanen, A. 2012, "Beyond stated and revealed preferences: the relationship between residential preferences and housing choices in the urban region of Turku, Finland", *Journal of Housing and the Built Environment*, vol. 27, no. 3, pp. 301-315.