

Explanations for preferences in Denmark for surroundings and location of the home.

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Abstract

This paper is based on a survey made in Denmark asking a random selection of the population about their preferences for surroundings and location of the dwelling. The paper tries to explain these preferences by background variables on the respondents and their housing situation and by the interdependence between the different preferences.

Introduction

Surprisingly little research has been made about housing preferences and how they vary between different groups and geographical areas. For different reasons it is difficult directly to reveal housing preferences. But a lot of knowledge has been obtained in studies on housing demand, reasons for staying or moving to a home, place attachment and housing satisfaction.

In this paper is reported the results of a Danish study of preferences for surroundings and location of the home. The data are obtained by help of a survey among a random selection of Danes. The purpose of the paper is to answer the following questions:

- What qualities by the surroundings and location of the home is most important
- How can the stated preferences for these qualities be explained
- What is the differences between preferences among households in different stages in the life cycle
- What is the differences between preferences among people with different preferences for living in cities or in the countryside

Earlier studies on housing preferences

Knowledge about what people find important about the dwelling and its environment may come from very different types of research. It may come from studies of how people use their home and feel attached to it (Gram-Hansen and Bech-Danielsen 2004). It may come from the extensive research on why people move from their home and choosing a new home, or why they did not move from it because of 'place attachment'. It may also be from studies of satisfaction or dissatisfaction with housing and residential areas.

The specific studies of residential preferences can be divided into respectively. 1. Stated preferences and 2. Revealed preferences (Floor and van Kempen 1997, Timmermans et. al. 1994, Coolen and Hoekstra 2001). The stated preferences are found by asking people directly about how they would prefer to live and why. The revealed preferences are found by examining how people actually live. It can be either recently moved households or all.

Both methods have methodological problems. By the stated preferences people do not necessarily take account of the possibilities for realizing them. This may mean that there could be significant variations between responds from households that should have the same preferences, as some have a realistic picture of their chances in the housing market - and have included this in their statements - while others have not, and therefore have preferences that are not realistic. Another common problem is that housing preferences usually consider many different aspects of the dwelling, which are examined separately. In the real world house hunters consider various combinations of residential properties. There have been developed different methods to handle this complexity (Coolen and Hoekstra 2001).

There has also been made a distinction (Floor and van Kempen 1997) between

1. Absolute preferences for the dwelling, its surroundings and location that are undeniable conditions for accepting a dwelling,
2. Trade-off preferences which may be sacrificed if other benefits can be achieved and
3. Relative preferences, which, although considered to be of importance, does not entail a rejection of the dwelling if they are missing.

By the method of revealed preferences, the problem is that the actual housing situation does not necessarily reflect the underlying preferences. This is because, first, that the real opportunities on the housing market and the individual's economic resources play a role. Even when trying to identify the economic conditioned preferences, the actual situation can give a false picture, because regulations of the market and imbalances may lead to that one can not obtain the optimal housing (Timmermans et. Al 1994, Skifter Andersen and Bonke 1980). In addition, different circumstances impeding mobility can result in that many families, despite significant changes in housing needs, are staying in homes that in the course of time increasingly come to differ from their preferences (Skifter Andersen and Bonke 1980).

A common key to determine, what kind of characteristics by the dwelling and its location are of greatest importance, does not exist. The reason is that different people have different preferences, but also that these have changed over time. One example is that 40 years ago utilities like bathroom and heating were crucial in housing choice, because a large proportion of dwellings lacked these basic facilities. Today, when almost all homes have such facilities they are considered as being obvious.

Housing preferences reflect to some extent the opportunities that are available on the housing market. It has for example been shown that preferences vary between different countries and between areas with different degree of urbanisation (Kauko 2006).

Based on a review of various studies regarding housing preferences, housing mobility and housing choices, place attachment and satisfaction with the dwelling and its surrounding¹, the following list of important characteristics of housing can be made:

Characteristics of housing, which have been included in different studies:

1. *The dwelling and its environment*: Size of the dwelling and number of rooms, the standard and furnishing, tenure, housing costs and financial conditions, types of houses, architectural expression, options for activity, free outdoor spaces, views, air, light and noise
2. *The local area*: The physical character and appearance of buildings, streets and squares, physical nuisances such as traffic, noise and pollution, maintenance standards in the area, access to green spaces and water, private social networks, lifestyle, status and social environment, crime and security
3. *Local public and private service facilities*: Shops, restaurants, social activities, culture and entertainment, institutions, sports facilities, playgrounds and conditions for children, local social networks and associations, etc.
4. *Location and transport*: Distances to jobs /education, urban centres and transportation opportunities. Location municipal services and taxes. Distances to family and friends.

As shown in the following section different people have different preferences in relation to all these characteristics of housing. One can only to some extent talk about 'average' preferences, but these averages can be very different depending on where they are studied, and can vary between different countries and types of urban areas. Kauko (2006) showed that with regard to stated preferences for the environment and location there were differences between Finland and the Netherlands, between central cities and suburbs and between multifamily and single family houses. In the Finnish multi-family housing the location in relation to work and service had the highest priorities, followed by local service, physical environment and local social conditions. In single-family houses in Helsinki the social conditions were of highest importance, followed by the location, physical environment and local service. In the Dutch suburbs, it was the physical environment, which was highest, followed by service, location and social factors.

¹ Floor og van Kempen 1997, Timmermanns et. al. 1994, Ærø 2002, Skifter Andersen og Bonke 1980, Kauko 2006, Coolen og Hoekstra 200, Molin et. al 2001, Vorel og Maier 2007, Skifter Andersen 2008, Hidalgo og Hernández 2001, Cuba og Hummon 1993, Mesch og Manor 1998

In Floor and van Kempen's study (1997) in the Dutch cities of Rotterdam and Tilburg of stated preferences for features of the dwelling, dwelling size was often cited as the most important characteristic of the dwelling, subsequently followed by housing type, housing costs, presence of garden, the location and local facilities. Preferences for two out of three properties were regarded as absolute, i.e. they could not be missing. This was mostly concerning housing size and housing costs, but also sometimes for the type of building and the social composition of the local area. Approximately 20 per cent of the characteristics were considered trade-off preferences. Most common was that preferences for environment could be departed in favour of lower housing costs or for preferred type of house.

Thorkild Ærø conducted in his Phd project (Ærø 2002 and 2006) a comprehensive survey of moving households in the Danish city of Aarhus. He distinguished between characteristics of the dwelling, tenure, properties of the house and its location and the social composition of the local area. General features of the dwelling scored highest, followed by the surroundings and location. The characteristics of the dwelling, which he found, on average, had the greatest impact was in order of priority: 1 Size and number of rooms, housing costs, 2 utilities and facilities, 3 architectural qualities and 4 a nice entrance. The type of building was not directly mentioned because the population was divided into groups that moved to different types of buildings, and there were differences between the priorities of these groups. But for nearly all housing size and housing costs had the highest importance.

Regarding preferences for location and surroundings, proximity to green areas scored highest, followed by 2. Proximity to work, 3. Avoidance of traffic and noise, 4. Proximity to public transport, 5. Proximity to the city centre, 6. The reputation and social status of the area, 7. The appearance of streets, buildings and squares, 8. Private services in the neighbourhood, 9. Conditions for children, 10. Community spirit, 11. Public institutions, 12. Sports and leisure facilities and 13. Cultural activities. The study showed some general differences between movers to different kinds of housing concerning preferences for characteristics of the neighbourhood. Owners are more worried about conditions in the neighbourhood than renters.

Finally, there were preferences concerning the social composition of the residents in the neighbourhood. The priorities were: 1. High degree of privacy and peace, 2. To live among others with similar views on how to behave, 3. To live close to friends, 4. To live near others with the same language and cultural backgrounds, 5. To live near the family, 6. To live near other families with children, 7. To live near peers, 8. To live among others with the same taste, 9. To live near others with the same type of work or education, 10. To live near others with similar hobbies.

What is important for differences in preferences

In the above literature can be found different opinions on why there are differences between housing preferences among different households. In the following we will discuss the following matters affecting housing preferences:

- Differences in family situation and course of life
- Income and other resources
- Culture and lifestyle

Family Situation and course of life

Differences in family situation and changes in the life cycle are traditionally seen as the factors of greatest importance for housing needs and preferences (Skifter Andersen and Bonke 1980, Clark and Onaka 1983, Howell and Freese 1983, Floor and van Kempen 1997). Especially the changes when children arrive to or leave the family creates dramatic changes in housing demands, particularly in the phase where the family establish their more permanent dwelling. When they get children, the need for space, facilities and environment changes dramatically. Later, when children move away from home, space requirements are reduced, but this does not always lead to moves to another home - because people find other uses for the space and partly because household mobility decreases dramatically over the years (Rossi 1955, Skifter Andersen and Bonke 1980). This is reflected by an overall sharp decline in the moves over the years (see Figure 1). Among the elderly mobility is even lower, although there may be radically changed housing preferences in terms of size, price, tenure, types of building and location.

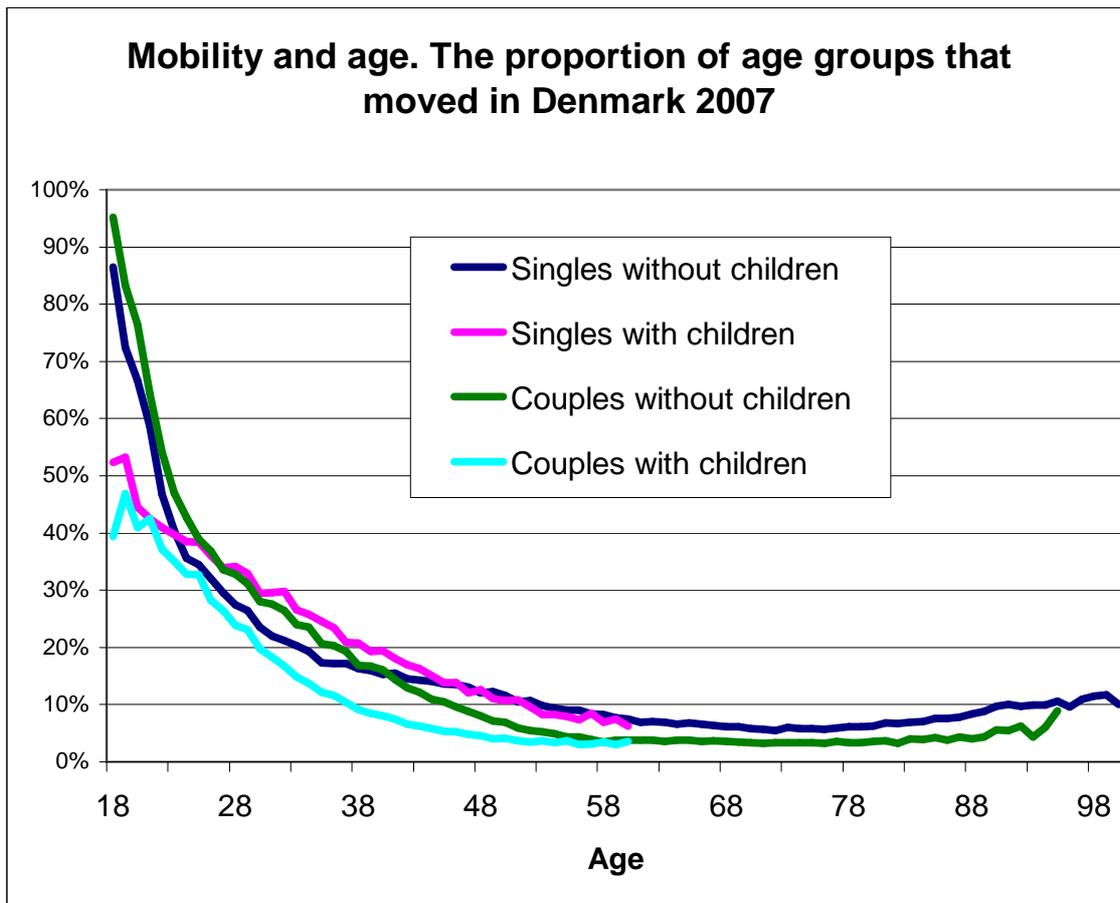


Figure 1. Mobility for different age and family groups in Denmark. The proportion of the group that moved in 2007 (only persons with a separate dwelling and not living with parents).

There are several reasons why the housing career is not always the same for families with the same family career. The first is the differences in their working careers, and related income development (see below), which means that the economic resources and associated housing options are different. These limitations can to a greater or lesser extent be reflected in the housing preferences depending on how realistic they can assess their future opportunities.

Secondly, there are differences in the opportunities that the housing market offers in different geographical areas. Because of social ties, and general place attachment (Mulder 2007, Hidalgo and Hernández 2001), most people are very much bound to a specific geographic area and will often stay there, even if they do not find adequate housing opportunities.

Finally, the emergence of a form of 'path dependency in housing' (Clapham 2005) often leads to that people are constrained on the housing market. Peoples' housing aspirations and housing choices are likely to be dependent on their previous accommodation and careers. At first, it has been shown that the housing in which one grew up is very important. People tend to choose the same type of housing that they grew up in (Ærø 2002). It has also been proved that the first housing chosen after completing education has an enormous impact on the later housing careers, and housing in mid-life also are crucial to the preferences we have when we are becoming elderly (Howell and Freese 1983). In contrast to earlier, however, the family career is no longer so straight because of more frequent divorce and career changes. Therefore, expectations for the future are not as frozen as earlier, which may affect housing preferences if one to a greater extent regards the housing situation as provisional (Floor and van Kempen 1997).

Work Career and financial resources

The individual's development over the life cycle in terms of employment and income also have a significant impact on the housing preferences, both on the short and the long term. In the young years residential location is influenced by the geographical location of educational institutions, while later it is more the workplace location. Incomes - and thus housing opportunities - are rising at the beginning of the career until the mid-forties and falls off sharply after 60 years.

But simultaneously owner-occupiers accumulate housing wealth over time, which means that they can maintain their housing consumption under declining income.

It has also been proved that it is not only the current income that affect housing choice, but just as much the expected income over the remaining life time (Artle and Varayia 1978). People with higher education, all other things being equal, have greater expectations about future income than those with low education and will therefore also have greater preferences for larger and more expensive homes.

The combination of this and the above described 'path dependency in housing' is especially important for the degree to which families will choose to establish themselves in owner-occupied dwellings. Some households - especially those who have high education or have higher incomes in the early stages of life - are buying a home at an early stage and remain in such during the rest of their life. Others, who do not succeed in buying a home in the family's establishment phase, may stay in rented accommodation during all their life, although they have preferences for owner-occupancy (Skifter Andersen and Bonke 1980).

Culture and lifestyle

In Thorkild Ærø's PhD. thesis, 'Residential preferences, housing choices and lifestyles' (Ærø 2002) he points out that there may be 'cultural' differences that are relevant to the priorities people have when choosing accommodation. He defines three groups:

1. *Those who do not choose – a pre modern modality.* For this group it is given where you feel at home. The dwelling chooses, so to speak, the occupier and therefore it is in principle no sense to talk about a choice. One feel at home in one certain place and all others are foreign. Where it is depends on conventions and traditions. One settles where family, ancestors, friends and colleagues has always lived. Housing choice is not reflected, not debatable, and it requires no explanation of why one live where one does.
2. *Those who choose - a modern modality.* With this modality the "right" housing choice is very important, and the question of where to live, is very reflected. The choice is rationally explained by economic or functional considerations, and is attributable to one's position in society – often given by a lifelong identity one has obtained through the work.
3. *Those who constantly choose - a late modern modality.* In this situation the housing choices are unclear and constantly changing. How to choose the "right" home when the right choice today may have no value tomorrow? In a world without fixed values, it is difficult and perhaps pointless to choose. Permanent choices mean that something else is rejected, which is unpleasant. Therefore one does not make a choice and one feel at home everywhere, but also feel as a stranger everywhere.

The theory suggests that there may be great variation in to what degree properties by the home; its surroundings and location have any significance for people. Persons belonging to the first group have in advance selected specific locations with a given social, cultural and physical content because they are attached to them. Such persons will either express preferences that correspond to the pre-existing content, or will not have any special preferences.

Also the third group is not likely to have particularly strong preferences concerning the dwelling and its surroundings, but perhaps more for its location and access to services, transport and culture. For some, the dwelling is just one of several places where they feel at home. They go about just as familiar on travels and vacations. The dwelling is a place where one relax and sleep while the real life is carried out elsewhere in space.

For the second group the dwelling is very important as the basis of family life. Especially if there are children, the home and its surroundings are of great importance, which must be reflected in the preferences. This group can be expected to have many and strong preferences.

The point here is that some people may have strong preferences for many aspects simultaneously, while others only have a few. Another is that the housing situation, which the family has already established may be crucial for their preferences because they have their lessons from this situation. Some properties of the local neighbourhood may be obvious to them because they cannot imagine living anywhere else - as perhaps especially holds for the first of the three groups. Another example is that people who live in the countryside might not see nature as something that is particularly important to prioritise - they live in the middle of it - while nature and parks can be a lot more important for those who lack it and live in cities. You can talk about that some may prioritise to rectify deprivation rather than qualities, which are obvious to them.

The Danish survey on housing preferences

The survey was conducted between 2.500 from registers randomly selected persons who were over 15 years old. 1.500 telephone interviews were obtained corresponding to a response rate of 60 per cent. The respondents were compared to the age and sex distribution of the whole Danish population and a minor difference was corrected by weighing the data. Data on the respondents' age, family situation, income, occupation and education were added from public registers

In the survey the 'stated preferences' were studied by asking people about their ideal housing preferences. The questionnaire concerned subjects like: preferences for tenure, dwelling size, building type, type of location and properties of surroundings and location. Moreover, there were questions about the reasons for preferences for renting or owner-occupation.

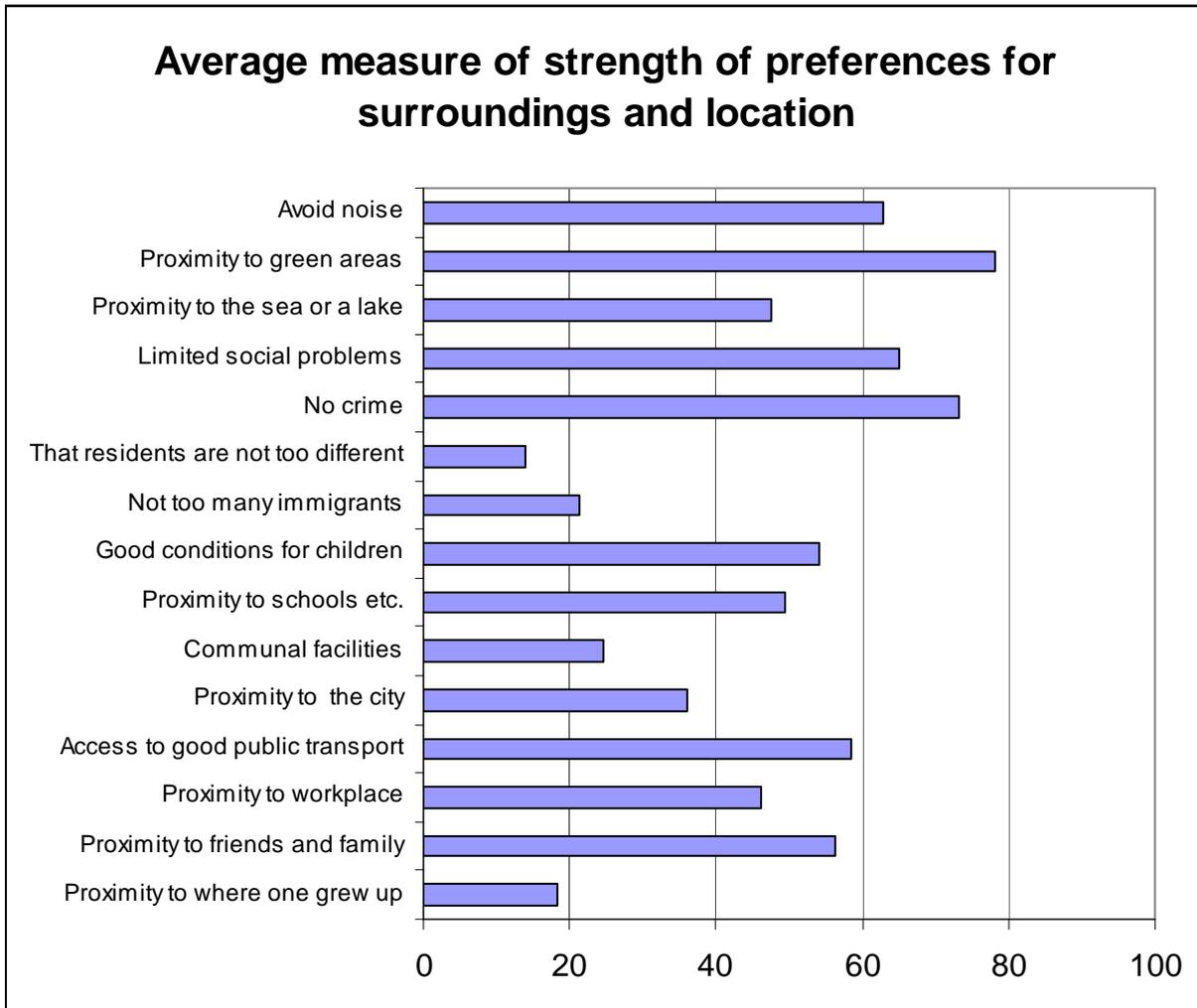
In this paper we will analyse the preferences for **properties and qualities by the surroundings and location** of the home. The housing preferences in this study is obtained by asking people about what qualities that have importance for their choice of dwelling. They can be grouped under five headings:

- 1. Physical conditions**
 - Undisturbed by noise from streets etc.
 - Proximity to green areas
 - Proximity to the sea or a lake
- 2. Social conditions in neighbourhood**
 - Limited social problems
 - No problems with crime
 - That residents are not too different
 - Not too many immigrants
- 3. Conditions for children**
 - Proximity to schools and day care institutions
 - Good conditions for children in general
- 4. Service and facilities**
 - Communal facilities, community centres etc.
 - Proximity to to the city's pulse - cafes and cultural life
- 5. Location and transport facilities**
 - Acces to good public transport
 - Proximity to workplace
 - Proximity to friends and family
 - Proximity to the place where one grew up

Respondents were asked if these properties had: 1. High importance, 2. Some importance or 3. No importance. On this basis, and 'Index' were calculated. Index = 100 means that all respondents believe that the property is 'very important', zero means that all believe that it has no impact, 50 means that all believe that it has some importance.

The importance of different preferences

The average size of the above-described index for the importance of the asked preferences is shown in Figur 2.



Figur 2. The average calculated index for the strength of the asked preferences for surroundings and location of the home. (100 = very important, 0 = not important at all)

Proximity to green areas seems in average to be the most important quality, and many people in Denmark also prioritise nearness to water – the sea or lakes. This could be a special Danish phenomenon because Denmark is a country with a very long coastline. In connection with the wishes for living near to nature it is important for many people to avoid places with nuisances from noise.

Social conditions in the neighbourhood are also very important for the choice of neighbourhood. It especially applies to the fear of crime and visible social problems. Denmark is a welfare state with less crime and social problems compared to many other countries why it should be expected that these conditions should be of smaller importance than elsewhere.

Denmark has until recently had a quite homogenous population with few immigrants with other cultural backgrounds and relatively small class differences. In recent years – especially after 1990 - the country has received some refugees and immigrants now constituting about 5 per cent of the total population. This has caused some political turmoil and debate with a tendency to depict immigrants in very dark colours. There has also occurred some ethnic segregation and concentration of immigrants on certain social housing estates. This has, however, not in general resulted in strong preferences among the Danes for avoiding neighbourhoods with many immigrants. As can be seen from the figure the importance of living in a neighbourhood with few immigrants in average is somewhere between ‘not important at all’ and ‘some importance’.

Taken into account that only a minority of households have children, the conditions for children and proximity to schools and day-care institutions are very important for the Danes. This will, more precisely, be shown below. Only a few households prioritise the presence of communal facilities like community centres in the neighbourhood.

One of the preferences concerns the nearness to the life and services provided in the larger towns and cities. In average only a minority has put special weight on this quality. As will be shown below this accounts for certain groups – especially young singles and couples without children.

Denmark has a quite well equipped public transport system and the access to public transport has importance for many of the respondents – more importance than proximity to the workplace.

Social networks also have some importance, especially proximity to family and friends. For only a few it is important to settle near to the place where they spent their childhood.

The coherence between different preferences for surroundings and location

To get a deeper understanding of what lies behind the answers to the questions on preferences for location and surroundings, an analysis of how preferences interact with one another was made. Moreover, an attempt to interpret the underlying motives was made by using factor analysis.

In the section above on earlier studies is referred to Thorkild Ærø's Phd thesis (Ærø 2002), which proposes the theory that some people may have strong preferences for many aspects simultaneously, while others only have a few. Moreover it was stated that the housing situation, which the family has already established may be crucial for their preferences because they have their lessons from this situation. Some properties of the environment may be obvious to them because they cannot imagine living anywhere else - as perhaps especially for the first of Ærø's three groups.

Immediately, it is likely that there is a direct correlation between some of the questioned preferences. This applies particularly to respectively the physical and social conditions and the circumstances of children. But when we measure the statistical correlation between the responses, it appears that there is a positive correlation between almost all variables. This suggests that some people have responded positively to many issues, while others have only prioritised a few of them. This confirms Ærø's hypothesis that some families have many priorities and aspirations for home environment and location, while others have few priorities. For one of Ærø's groups (group 3: those who constantly chooses) it is likely that they have a particular strong priority to stay close to the city's pulse or close to good transport facilities. For another group (those who do not choose because the choice is given by a certain place with family and friends), it is expected that they want to live close to the place where they grew up. It turns out that these two preferences are rarely correlated with the other preferences and that preferences for the city's pulse and access to transport are negatively correlated with the desire to live close to the place where one grew up. So it is two very different groups who have these preferences.

Concerning preferences for social conditions, there is a very strong link between the desire to avoid social problems and crime (Table 1). The relationship is not quite as strong with the desire to avoid immigrants and that residents should not be too different. However there is a relatively strong link between the desire to avoid immigrants and the desire that the residents of the area should not be too different.

Table 1. The statistical correlation between answers concerning preferences for the social environment of the dwelling and for avoiding noise.

	Limited social problems	No crime	Residents are not too different	Few immigrants
No crime	0,71			
Residents are not too different	0,19		0,15	
Few immigrants	0,27		0,25	0,38
Avoid noise	0,37		0,34	0,11

Generally there is only a weak correlation between preferences concerning the social environment and other preferences. A bit surprising, for instance, is that there only is a weak link to demands for good conditions for children (0.10 and below). The only one of the other factors, which correlates much with social preferences, is the desire to avoid noise, as shown by the table. So it is some of the same people who want to avoid social problems and noise.

There is, as one would expect, a strong correlation between the desires for proximity to green spaces and proximity to water (0.39). There is also some connection between desires for green space and to avoid noise (0.25). It is people who attach importance to peaceful and rural surroundings.

Wishes for good conditions for children are closely woven with the desire for good schools and day care centres (0.67), but also to some extent with the wishes for communal facilities in the neighbourhood (0,19). Preferences for to living 'close to the city's pulse' have low correlation with nearly all other preferences and in some cases a negative correlation. Examples include the desire for proximity to green areas, avoiding noise and conditions for children. All the other preferences play a very minor role for those who will live in the central parts of cities. There is greater correlation with the location variables as good transport links (0.21) and distance to job/education (0.17).

Finally, there is a reasonably good correlation between the desire to live close to friends and family and the desire to live close to the place where one grew up (0.26). Both of the two factors are to some extent correlated with the desire to live close to work and education (respectively 0.19 and 0.14), but otherwise they have a different relationship with the other variables. The desire to live close to friends and family have a small correlation with the desire to avoid social problems and crime (0.11 and 0.14), while the desire to live close to the place where one grew up to some extent is correlated with the desire to avoid immigrants and to live in a place where residents not should be too different (0.11 and 0.13).

Use of factor analysis to construct new variables explaining preferences for surroundings and location of the home

Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance that is observed in a much larger number of manifest variables. Factor analysis can also be used to generate hypotheses regarding causal mechanisms or to screen variables for subsequent analysis.

As shown by the above analyses of correlations between answers in the survey, there is mutual interdependence between some of the different preferences for surroundings and location and not between others. To examine to what extent there is a pattern in these dependencies is carried through a factor analysis of the fifteen variables listed above.

In this case the analysis is used to construct new transverse variables or factors that sum up and explain the patterns lying behind the original answers.

Table 2 Results of factor analysis of stated preferences (correlation between factors and input variables)

Preferences	New factors					
	1	2	3	4	5	6
Avoid noise	0,61	0,13	-0,02	0,24	-0,07	-0,07
Limited social problems	0,87	0,02	0,18	0,06	0,08	-0,01
No crime	0,86	0,02	0,14	0,03	0,07	0,09
Proximity to schools and day care institutions	0,10	0,87	0,01	-0,02	0,11	0,01
Good conditions for children in general	0,07	0,88	0,02	0,06	0,05	0,00
Communal facilities, community centres etc.	-0,06	0,34	0,14	0,18	-0,08	0,43
That residents are not too different	0,05	0,10	0,83	0,05	0,02	0,03
Not too many immigrants	0,22	-0,05	0,75	0,04	0,07	0,07
Proximity to green areas	0,21	0,15	0,04	0,78	0,01	0,03
Proximity to the sea or a lake	0,08	-0,07	0,05	0,81	0,08	0,06
Access to good public transport	0,07	0,04	-0,08	0,05	0,12	0,70
Proximity to the city's pulse - cafes and cultural life	-0,04	-0,11	0,13	-0,04	0,04	0,72
Proximity to workplace	0,08	0,22	-0,15	-0,17	0,52	0,27
Proximity to friends and family	0,08	-0,04	0,01	0,11	0,73	0,18
Proximity to the place where one grew up	-0,09	0,08	0,23	0,09	0,73	-0,22
Explained part of variation in input variables (per cent)	18,3	11,5	9,7	8,1	7,7	7,5
Eigenvalues	2,74	1,72	1,45	1,22	1,15	1,12

Note: The analysis is varimax rotated.

The factor analysis identified 6 factors that explain two thirds of the variation in the stated preferences. In Table 2 is shown the correlation between the each of the six factor variables and each of the input variables representing the answers in the survey. The table can be used to interpret the meaning of the six factor variables. They can be explained as:

Factor

1. *Avoid social nuisance*: This factor has a very strong link to the preferences on social issues in housing: social problems and crime, and also to noise.
2. *Good conditions for having children*: The most important variables are good conditions for children, good schools, etc. and communal facilities. Proximity to the workplace also has some significance.
3. *Social homogeneity*: Residents in the neighbourhood must not be too different and preferably Danes. There is some consistency with the desire to live close to the place where one grew up.
4. *Close to nature and to peaceful surroundings*: Living near green areas and water are dominant. In addition, to some extent to avoid noise
5. *Close to social networks*: The most important is to stay close to the place where one grew up and/or close to friends and family. Proximity to the workplace also is important.
6. *Close to city life and transport*: It is important to stay close to the city's pulse and good public transport links. Here communal facilities in the neighbourhood also has a certain weight, as well as proximity to job

The analysis thus suggests that the preferences for surroundings and location of homes can be divided into these six dimensions. The first dimension 'Avoid social nuisance' is the most important as it was shown in Figur 2 because avoiding social problems and crime are very important preferences. The factor also to some extent relates to the wish not to settle in neighbourhoods with many immigrants. People dominated by this factor may be expected either to be much concerned with the status of their neighbourhood, where social problems, crime and immigrants certainly will

give a bad image and low status, or they are people that to some extent fear their surroundings and have a great need of protection. This is confirmed by the importance for this group of avoiding noise.

As suggested by the above analyses of correlation between the preference variables the demand for social homogeneity in the neighbourhood is a special dimension separated from the factor concerning social nuisances etc., even if there are a small correlation with social problems and crime. It is an interesting conclusion that this is the case. If the fear for living together with foreigners does not concern concrete social problems and crime, what then is the reason? Could it have something to do with that there is a correlation with the preference for living nearby the place one grew up? We will discuss this further below, when we look at the connection between this factor and the preferences for living in the city or living in the countryside.

The fourth factor 'Close to nature etc.' also consists of preferences that are important for many (proximity to green areas and water). This is to some extent connected to the wish for quiet and peaceful surroundings. The factor has a negative correlation with the wish to live near to city life, but not as much as could be expected. Most of these people do thus not prioritise city life, but some of them do. For some people preferring to live in cities, closeness to parks could be very important. It can also be seen that this factor has a larger negative relationship to preferences for living close to the workplace. This can be interpreted as that people dominated by this factor either do not work (as can be seen below) or that they are prepared to commute in exchange for coming closer to natural surroundings. At last it can be seen that this factor to some, small, extent is related to the wish for social networks and communal facilities. It could be because of that some people relate their preference for living in the countryside with a wish to join a tight local community in these places.

Good conditions for children are a high preference for families with children, as it is shown below. These are mostly families in employment and that must be why the factor is somewhat correlated with the wish for closeness to workplaces. There is also a small correlation with proximity to green spaces, to avoid noise and to living in places where residents are not too different. All this could also be for the sake of the children. On the other hand there is a negative correlation with preferences for city life.

In the explanation of the last two factors, *Ærø's* distinction (*Ærø* 2002) between pre modern, modern and late modern modalities could be applied. The factor 'Close to social networks' could be associated with a pre modern modality, while the factor 'Close to city life' could be related to a late modern modality. The first factor is strongly related to preferences for living nearby the place where one grew up and nearby family and friends. It is not related to any other of the preferences except for preferences for proximity to the workplace. It is appropriate to consider people controlled by this factor as not doing a choice except for living in a certain place – most often the place where they grew up.

The 6th factor has a strong correlation with preferences for city life, for access to public transport and for communal facilities. Moreover, proximity to work is important. It is negatively correlated with the wish to live where one grew up, but family and friends – perhaps especially the latter – has some importance. All the other kinds of preferences do not have importance for this factor. It could easily be associated with a group of people in the late modern modality for whom access to city life and transport are the dominating motives while many other kinds of preferences do not have importance.

The connection between preferred degree of urbanisation and preference factors

There is, as could be expected, a strong relation between the stated preferences for surroundings and if people prefer to live in cities or in the countryside. In Table 3 is shown the average factor scores (*100) for respondents divided on the basis of their stated preference for living in cities, towns, villages or countryside. The score varies from -100 to 100 (usually from -1 to 1).

Table 3. Average factor scores for divided on their preferred location of the dwelling

Preferred location	Avoid social nuisance	Conditions for children	Social homogeneity	Close to nature	Social networks	Close to city life	Distribution on preferred locality
Centre of larger town/city	-29,3	-19,9	3,4	-28,1	-6,4	60,4	17%
Dense areas near city centres	10,6	15,4	-25,8	-22,9	-13,1	42,5	5%
Suburbs	11,4	5,4	5,7	-2,6	5,3	12,9	26%
Smaller or middle-sized towns	6,7	2,3	2,2	-2,6	5,2	-11,9	24%
A village	-3,4	14,2	-0,8	24,2	4,7	-42,5	13%
In the countryside	1,2	-9,7	-8,7	25,1	-11,2	-45,7	15%
All	0	0	0	0	0	0	100%

The column to the right shows the distribution of respondents on their preferred location. A little less than half of them prefer to live in larger towns and cities either in suburbs or closer to the centre. One out of four prefers provincial towns, 13 per cent would like to live in a village and 15 per cent in the countryside. Compared to the place they live a little more of them want to live in the countryside than their present dwelling.

As expected those preferring to live in city centres also are strongly influenced by the factor 'Close to city life', and the influence drops sharply with less urbanisation. It has, however, also some importance in the suburbs.

Preferences for closeness to nature has – as could be expected – the opposite connection with preferences for degree of urbanisation. It is very strong for people who prefer to live in villages and the countryside and very weak in the city.

For the factor 'social networks' there also to some extent is this connection. It is stronger in the suburbs, towns and villages, but weak for people who want to live in city centres. A little surprising it is also weaker in connection with preferences for living in the countryside. An explanation for this could be that living in the countryside is connected to some social isolation because there is a longer distance to neighbours.

The last three factors have a more inconsistent variation with the preferred degree of urbanisation. Concerns with social problems are most important in the suburbs and in urban areas near the city centres – perhaps because many of the problems have been located here in the last 30 years – and to some extent in provincial towns. It is least important in city centres and, next to that, in the countryside. In the first case the reason could be that people preferring to live in central cities are more cosmopolitan and more tolerant to social problems and not so frightened by the perspectives of crime. It has also something to do with the age of this group as will be showed below. For the countryside the explanation could be that social problems are not so visible in the countryside.

Priority for good conditions for children is strong in the dense city areas close to the centres. It is as more significant as there are much fewer families with children in these areas, while there are many in the suburbs. This could be because conditions for children have the greatest importance in places where they are worst. Conditions for children have the least importance in rural areas where these conditions must be considered as excellent except for a long distance to schools and other institutions.

Preferences for social homogeneity are significantly lowest in urban areas near city centres. The reason could be that these areas often are very mixed. People living here or knowing these areas are used to a heterogeneous population. This is not always the case in the suburbs that are more divided in different neighbourhoods populated by different social classes and ethnic groups. It is a little surprising that people preferring the city centres also have a somewhat higher preference for social homogeneity. Perhaps this is a result of the increasing gentrification of the city centres, where more affluent groups are moving into the city. In the countryside social homogeneity is not a question because one most often is living far away from neighbours.

The connection between phase in the life cycle and preferences

As discussed above in the section about earlier studies of housing preferences it is to be expected that preferences change over the life course. This will be examined in this section using the factor variables, which was determined in

the factor analysis. At the same time an exposure of how the factors vary between life cycle groups can contribute to a further understanding of the meaning of these factors.

The respondents have been divided into nine life cycle groups as is shown in Table 4. The division is based on data from public registers on age and family situation. In seven per cent of the cases respondents were living in a mixed household where several persons were living together without being a family. It was mostly young people. Nine per cent of respondents were young people still living in their parents home.

Table 4. Respondents in the survey distributed on life cycle groups

Life cycle group	Number of respondents	Distribution
1. Living at parents home	137	9,0%
2. Young single < 30 years	28	1,8%
3. Young couples < 30	50	3,3%
4. Couples w. children	454	29,7%
5. Lone parents	46	3,0%
6. Singles 30-59	79	5,2%
7. Couples 30-59	210	13,7%
8. Elderly couples 60 -	309	20,2%
9. Elderly singles 60 -	108	7,1%
10. Mixed households	107	7,0%
Total	1528	100%

In Table 5 is shown for each life cycle group the average factor scores for the six factors.

Table 5 Average scores for factors explaining preferences for surroundings and location of the home among different life cycle groups.

	Avoid social nuisance	Conditions for children	Social homogeneity	Close to nature	Social networks	Close to city life
Living at parents home	-8	22	-6	-57	36	44
Young single < 30 years	-54	-52	13	-98	12	46
Young couples < 30	-4	-3	-9	-27	20	14
Couples w. children	12	59	-8	-2	6	-19
Lone parents	7	50	-15	-16	-17	-1
Singles 30-59	-4	-37	-34	1	-13	19
Couples 30-59	7	-25	2	8	-12	-12
Elderly couples 60 -	-10	-45	13	34	-15	-6
Elderly singles 60 -	5	-86	42	28	-22	18
Mixed households	-15	-24	-2	-1	12	13

Continuing the discussion on the meaning of the factors revealed, it is interesting to notice from the table that the factor 'social homogeneity' mostly appears among the elderly and especially among singles. If you divide the respondents in people outside and inside the labour market it is so that people without work have a positive score (20) while people with work or studying have a negative score (- 8). This supports the hypothesis that this factor is associated with people that are generally vulnerable to their social surroundings, among others because they are staying there most of the time. But an analysis of the specific responses to the questions in the survey reveals that the elderly especially often states a preference to avoid neighbourhoods with many immigrants. This could confirm an assumptions about that people, like many elderly, who do not have a more cosmopolitan view of the world are more inclined to be controlled of this factor in their choice of housing. This could be supported by the fact that the group least dominated by the factor is the middle-aged singles and lone parents. But it is not obvious why young singles have a – small – positive factor score. It is even more inexplicable as the same group has the most outstanding negative score on the factor 'avoid social nuisances'.

It is also a bit surprising that the factor 'social networks' has more importance for young people than for the elderly. Two explanations can be forwarded. The one is that for young people, who have left their place of birth for getting education in a distant city, it could have a very high priority to go back to the place where they grew up. For elderly, who have lived their all their life it is taken for granted. The other is that young people with a weak network of friends and without their own family puts very much weight on living close to their friends, while the social network for the elderly is more granted or perhaps absent. It is nevertheless surprising that the social network factor has such a low priority among the elderly. Thirty per cent of the respondents over 60 years have answered in the survey that proximity to family and friends is without importance for them.

The figures in the table give an illustration of how preferences for the surroundings and location of the home changes over the lifetime. It must be remembered, however, that the data reveals the preferences of a cross section of the population, and that there could be differences between different generations. In the following is summarised what the table can say about the development of preferences during the lifecycle.

For young people living at home it is very important, when they try to get their own dwelling, to live close to city life. They also put much weight on closeness to social networks. It is important for them to live close to friends and perhaps also near to the family. Some of them are still feeling like a kind of a child and puts weight on good conditions for children by which they could mean sports facilities, youth clubs etc. Closeness to nature has no priority. When leaving home and living as young singles, preferences for city life is even more pronounced. Social nuisances, conditions for children and nature play no role at all. Social networks are still important but not so much as when they lived at home. Middle-aged singles (30 to 59 years) still have preferences for city life, but not as pronounced as for the young. They deviate from the young singles by having very low preferences for social homogeneity in their neighbourhood and also for social networks. Perhaps this partly can be explained by a difference between generations, where public concern about neighbourhoods with many immigrants and social problems has been more noticeable in the last 20 years.

When young people move together with a person form the other sex and make the beginning of a family, preferences begin to change. Closeness to city life is still important, but not so much as for young singles. Closeness to social networks gets more importance and social nuisances and conditions for children is not any longer very unimportant. For the middle aged couples (30-59 years) without children preferences are somewhat different. This group could be dominated by people who have either given up to have children or who have had them. Most of them do not want to live close to city life, they are not concerned with conditions for children and social networks, but some of them have preferences for nature, for social homogeneity and for avoiding social problems.

The most dramatic change in preferences occurs, however, when people get children. Conditions for children become the single most important preference and closeness to city life the most unimportant. There is also a higher preference for avoiding social nuisances, which also can be explained as a consideration for the children. Social networks have still a little importance. Lone parents do not deviate very much from couples with children

Finally preferences change dramatically among the elderly couples and singles over 60 years. Closeness to nature and social homogeneity becomes the dominating and central preferences. There are some differences between singles and couples, which to some extent can be explained by that singles in average are older. Some of the singles want to live close to city life, while couples do not. Singles are also very much concerned with the social homogeneity and to a small extent with social problems. They also have preferences for nature but are somewhat less concerned with this than couples. It is a little surprising that singles also have less preference for social networks, which one should expect to have more importance for people living alone.

Conclusions

The purpose of this paper was to answer the following questions:

- What qualities by the surroundings and location of the home is most important
- How can the stated preferences for these qualities be explained
- What is the differences between preferences among households in different stages in the life cycle
- What is the differences between preferences among people with different preferences for living in cities or in the countryside

The housing preferences in this study are obtained by asking a random selection of people in Denmark over 15 years about, what qualities by the surroundings and location of the home have most importance for their choice of dwelling.

As the discussion in the paper reveals, there are two reasons why housing preferences are difficult to reveal and why the result of these kinds of studies must be treated with caution. The first is that stated preferences sometimes do and sometimes do not take into account to what extent it is possible to realise them. People with the same underlying preferences could give different answers because they to a different extent consider how realistic they are. The second is that the way people make priorities in relation to their future choice of a home can be influenced by their present housing situation and especially by the disadvantages, which they very much want to improve. For this reason people for instance living in places in cities, which lack green spaces, could have a higher preference for green spaces than people living in the countryside where there is plenty of nature. Preferences must be related to the present housing situation and the circumstances in which people see their future living place. Some preferences for location and surroundings of the home is taken for granted and not to be discussed.

A factor analysis of the 16 different questions about preferences in the Danish survey can be interpreted in the way that six different factors has influence on how people choose the location and surroundings of their home. They are named: 1. Avoid social nuisance, 2. Good conditions for having children, 3. Social homogeneity, 4. Proximity to nature and to peaceful surroundings, 5. Close to social networks, 6. Close to city life and transport.

An interesting result is that preferences for avoiding neighbourhoods with social problems and crime are not correlated with preferences for social homogeneity that is living in a neighbourhood with few ethnic minorities and where residents are not too different. It is thus not the same people who have these different priorities even if social problems and crime in neighbourhoods often have been connected with multiethnic neighbourhoods in the Danish media. This could mean that preferences for social homogeneity in the neighbourhood have more to do with political opinions and perhaps status.

The study points to that for the Danish population as a whole most people put weight on avoiding social nuisances, on proximity to nature etc. and on proximity to family and friends. But preferences vary very much between different subgroups of the population.

In the paper has been used a theory of housing choice formulated by Thorkild Ærø (Ærø 2002). He defines three groups:

1. *Those who do not choose – a pre modern modality.*
2. *Those who choose - a modern modality.*
3. *Those who constantly choose - a late modern modality.*

Persons belonging to the first group have in advance selected specific locations with a given social, cultural and physical content because they are attached to them. Such persons will either express preferences that correspond to the pre-existing content, or will not have any special preferences. Also the third group is not likely to have particularly strong preferences concerning the dwelling and its surroundings, but perhaps more for its location and access to services, transport and culture. For some, the dwelling is just one of several places where you feel at home. They go about just as familiar or on travels and vacations. The dwelling is a place where you relax and sleep while the real life is carried out elsewhere in space. For the second group the dwelling is very important as the basis of family life, and thus serves to make daily life convenient and functional. Especially if there are children, the home and its surroundings are of great importance, which must be reflected in the preferences. This group can be expected to have many and strong preferences.

The empirical evidence in this paper supports Ærø's theory. In the first place it was revealed that some of the respondents had strong preferences for many different qualities of the surroundings and location of the home, while others had very few. It was shown that preferences that could be connected to the first group – close to social networks: living close to family and friends and to the place where one grew up – had little correlation with other preferences meaning that people with these preferences seldom had other preferences. It was also shown that people, who have preferences that could be connected to the last group – living close to city life and to transport facilities – seldom have other preferences. Most of the other preferences, however, appeared together pointing to the second group with many different preferences.

The study illustrates how preferences for the surroundings and location of the home changes over the lifetime. For young people the dominating factor is closeness to city life and transport and this preference is gradually reduced with age and when they form couples. It is totally disappeared when people get children. Proximity to social networks also is very important for young people and not so important for families with children and elderly. The opposite changes are

taking place for preferences for nature, which are very low among young people and very high among the elderly. Preferences for good conditions for children are – as could be expected – very important for families with children and also for some young couples expecting children. It is also most important for families with children to avoid social nuisances in the neighbourhood, while this has no importance for young singles. Preferences for social homogeneity in the neighbourhood is very important for elderly single people over 60 years and to some extent for elderly couples.

There are some expected connections between preferences for living in city, in provincial towns or in the countryside and what qualities are found important concerning surroundings and location of the home, but there are also some unexpected. As expected preferences for city life are much more frequent in cities than in villages and the countryside and proximity to nature the other way round. Perhaps more unexpected is that social networks are most important in suburbs, provincial towns and villages, but not in the countryside. Preferences for avoiding social nuisances are most common in dens areas in cities outside city centres and in the suburbs, which could be explained by that it is here social problems and crime are most commonly found. A request for social homogeneity most often is connected to preferences for suburbs.

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