

University of Cologne  
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Working Paper<sup>1</sup>

**The impact of new household types on suburbanisation in Germany and the Netherlands.  
The necessity of further research**

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## **Zusammenfassung**

Den folgenden Ausführungen liegt die Annahme zu Grunde, dass neue Haushaltstypen als soziale Innovation verstanden werden können und dass deren Diffusion durch den Prozess der Suburbanisierung untersucht werden kann. Es wird der bisherige Forschungsstand aufgearbeitet, anhand dessen weiterführende Fragen entwickelt und mögliche theoretische und methodische Annäherungen aufgewiesen werden.

Seit ihrer Entstehung Ende der 1960er Jahre hat der Anteil neuer Haushaltstypen – wie Singles, nicht-eheliche Lebensgemeinschaften, Alleinerziehende und Wohngemeinschaften – an der Gesamtbevölkerung stark zugenommen. Im Bruch mit traditionellen Haushaltstypen streben sie nach der Verwirklichung neuer, meist postmaterialistischer Werte, welche Veränderungen im Entscheidungsverhalten auch auf räumlicher Ebene nach sich ziehen.

Migration wird nachstehend als ein Mechanismus der Diffusion neuer Haushaltstypen verstanden: Nachdem diese soziale Innovation zunächst lange ein Phänomen der Kernstädte blieb, fällt bei jüngsten Beschreibungen der Suburbanisierung die Diffusion neuer Haushaltstypen in das städtische Umland auf.

Neue Haushaltstypen im Kontext der Suburbanisierung zu untersuchen, stellt daher eine bedeutsame Analyse aktueller gesellschaftlicher Veränderungen dar. Unzureichend erforscht sind dabei die Wanderungsentscheidungen der Haushalte: Relevant sind einerseits die Veränderungen in den Wanderungsmotiven verschiedener Haushaltstypen und andererseits der Einfluss städtischer Eigenschaften wie die Situation des Arbeits- und Wohnungsmarktes, die finanzielle Lage etc. auf Wanderungsströme am Beispiel einzelner Städte.

Ein internationaler Vergleich kann weiteren Aufschluss über fördernde und begrenzende Einflussgrößen geben: Beispielsweise stellen die Regionen Nordrhein-Westfalen in Deutschland und Randstad in den Niederlanden zwei räumlich und gesellschaftlich sehr ähnlich entwickelte und strukturierte Regionen dar. Bezüglich jüngster (post-) suburbaner Entwicklungen ist die Randstad jedoch deutlich vorangeschritten und kann daher Hinweise auf zukünftige Entwicklungen in Deutschland liefern.

Methodisch können zum einen Wanderungsmotivbefragungen, d.h. von Städten durchgeführte Befragungen zu den Umzugsgründen wegziehender Haushalte, verwendet werden: Eine in Vorarbeit zusammengestellte Datenbank aller in Nordrhein-Westfalen durchgeführten Wanderungsmotivstudien kann um vergleichbare niederländische Studien ergänzt werden. Die Auswertung durch eine Meta-Analyse, der Zusammenfassung aller empirischen Befunde eines Forschungsgebietes, sollte somit angestrebt werden. Zum anderen können amtliche Daten zum Umfang von Stadt-Umland-Wanderungen, der Ausprägung städtischer Charakteristika und dem Anteil neuer Haushaltstypen herangezogen werden. Aus der gleichzeitigen Anwendung beider Untersuchungsmethoden werden grundlegende Einsichten in die Auswirkungen von neuen Haushaltstypen auf die Suburbanisierung erwartet.

## Summary

In the following, new household types are conceived as a social innovation. The focus will be on their diffusion in suburbia. Relevant questions on this topic will be developed on basis of the current state of research. Furthermore, a theoretical and methodical approach will be outlined.

Emerging at the end of the 1960's, the portion of new household types – e.g. singles, non-marital couples, single parents, and persons sharing flats – on the total population increased substantially. Breaking with traditional households types, they aim for new, often post-materialistic, values. This causes changes in the decision behaviour, also on a spatial level.

Migration, as referred to below, is considered the main mechanism of diffusion for new household types: in the beginning, this social innovation was primarily a phenomenon of the central city. But studying recent processes of suburbanisation, new household types migrate more and more in suburban areas.

Analysing new household types in the context of suburbanisation constitutes a significant analysis of current social changes. Moreover, the decisions of households to migrate are investigated insufficiently. Changes in migration motives are relevant, as well as the influence of municipal characteristics such as the labour and housing market, the financial situation and others on migration flows.

An international comparison can point out similar, as well as different developments. For example, North Rhine-Westphalia in Germany and Randstad in the Netherlands are two regions that are similar in respect to spatial developments and structures. Considering recent (post-) suburban tendencies, Randstad is preceded distinctly which can give information about future developments in Germany.

Methodically, migration motive studies, meaning municipal inquiries about the reasons for migration, can be used, on the one hand. A database of all migration motive studies of North Rhine-Westphalia, which already exists, can be completed with comparable studies from the Netherlands. It seems reasonable to do the evaluation by the method of meta-analysis – an aggregation of all empirical findings of one field of research. On the other hand, official data on the degree of city-hinterland-migrations, urban characteristics, as well as on the proportion of new household types can be examined. Using both methods simultaneously, basic insights in the impact of new household types on suburbanisation can be expected.

## **1 Introduction**

The following paper deals with impacts of new household types on suburbanisation and the lack in research on this topic. Special emphasis is laid on current trends in Germany and the Netherlands.

Therefore, in the first subchapter "Concept of innovation" (Chapter 1.1) the relations between innovation and new household types, as well as diffusion and suburbanisation are characterised. Moreover, the value to social innovation research is pointed out. The topic will be specified for two European regions: North Rhine-Westphalia in Germany and Randstad in the Netherlands (Chapter 1.2). On the basis of the subchapter "Current state of international research" (Chapter 1.3) where recent research on suburbanisation of new household types is discussed emphasis will be laid on the lack in research. In consequence, "Suggestions for further research" (Chapter 2) will be expressed which are necessary to answer in recent and future research. The "Theoretical approach" (Chapter 3) gives a short overview of theories which can be applied to the diffusion of new household types and explicates the "Model of Life Course" (Chapter 3.1) which is constitutive for the "Hypotheses" (Chapter 3.2). The latter refers to the suggestions made in Chapter 2. In the last subchapter "Methods" (Chapter 4) different methods which can be applied are presented.

The leading questions of this paper can be formulated as follows: what are recent as well as future impacts new household types have on suburbanisation and what are the differences and similarities between cities in the Netherlands and Germany?

### **1.1 Concept of innovation**

A prior concern of this paper is to develop a basic concept of innovation: in general, innovation is defined as the "introduction of something new" (Zapf 1989: 173, for an overview of definitions see also Hauschildt 1997: 3ff.). However, "new" does not necessarily stand for something that has not existed before. The reorganisation of industrial processes, a new way of combining traditional products, as well as ideas that are perceived as new can be regarded as innovations (Berg/Brandt 1998: 233, Zapf 1989: 174). Zapf (1989: 177) refers to Merton when he summarizes innovations as new instruments which allow a better achievement of socially accepted aims. He distinguishes between:

- a) technical innovations,
- b) socio-technical innovations,
- c) social innovations.

In the field of innovation research, theories and empirical studies are linked quite often to technical innovations (Berg/Brandt 1998, Engeln/Seitz 1998, Feldmann 2000, Gillwald 2000, Hauschildt 1997, Hayter 1997, Mensch 1971, Rammert 1988, 2000, Schröder 1995). It may be reminded of the "Theory of Long Waves" developed by Schumpeter (1939) who,

moreover, equates both new products and new processes with technical innovation (Zapf 1989: 175). The interest in the latter is easy to explain: the discovery of technical innovations is associated with the prospect of economical growth and profit.

As already indicated, the relevance of social innovations is often underestimated for the benefit of technical innovations. As a result, scientific studies dealing with social innovations have been neglected. Nevertheless, a society is characterised by more than only technical, respectively economical aspects. The research of Zapf (1989) and recently Gillwald (2000) on this topic has to be emphasised. Concentrating on social innovations these studies help to comprehend changes in society.

Gillwald (2000: 7) describes social innovations as subprocesses of social change which aim for high-valued social purposes. One example of a current social innovation is the formation of new household types, which is associated with the rise of post-materialistic values, meaning autonomy and self-realisation (Gillwald 2000: 14ff.). This includes especially the increasing proportion of non-marital couples since the 1970's. Further household types emerged and dispersed: living together with flatmates became more popular particularly for students and, thus, the proportion of people living alone with or without partner or as single-parents rose. Thereby, the proportion of new household types increased steadily during the last decades (Fig. 1 and Droth/Dangschat 1985, Glatzer 2001, Herlyn 1990, Spellerberg 2001). This process has not finished yet: the age of first marriage, as well as the proportion of non-marital couples without children still increases (Institute of German Economy 2005). In addition, studying new household types is of lasting relevance: for example, associated with the value change of the new household types, migration structures vary. In turn, urban planning has to be adapted (Droth/Dangschat 1985).

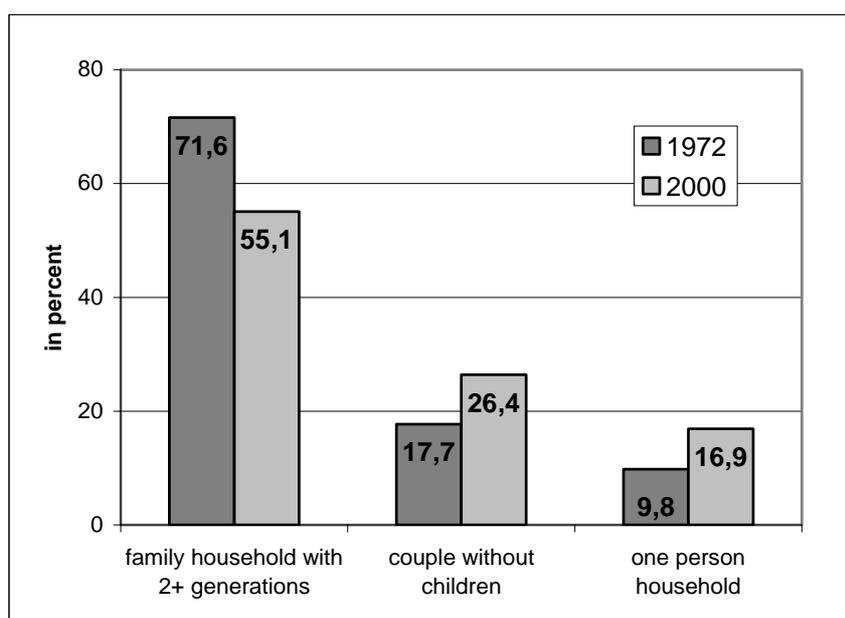


Figure 1: Household Types in West-Germany 1972 and 2000  
(Source: Federal Statistical Office 2003: 37)

Analysing (social) innovations as a process always includes a discussion of their diffusion (Lave/March 1978, Schmidt 1976, Stoetzer 1995). An important aspect of this diffusion process is its regional dimension resulting from geographical mobility of the innovators (Feldotto 1996). The diffusion of new household types results from the decision to migrate. Therefore, migration is an important mechanism of diffusion causing changes in the social structure of regional units. New household types moving into the central city while traditional households migrate to the urban fringe are one example. The city-hinterland-migration as a special part of the diffusion has to be studied in particular (Chapter 1.3):

Suburbanisation is defined as the geographical mobility of people and firms from the central city to the urban fringe since the 1950's (e.g. Leser 1997). One of the major reasons for the city-hinterland-migration is the offer of more space and green, as well as the cheaper land price for building houses in the suburban area (Harlander/Jessen 2001, Federal Office for Building and Regional Planning 2000).

Although its beginnings can be dated back so early, suburbanisation has not lost its importance and topicality. On the contrary: new studies on this topic are valuable and necessary because the city-hinterland-migration still lasts and is in flux. Analysing suburbanisation and the diffusion of new household types allows finding solutions for large-scale problems. First, as a result of the commuter traffic, the environment gets highly polluted and the excessive sealing of natural ground emerges at the expense of the natural balance (Bontje 2005, Hesse 2001, Heuer/Schäfer 1978). Secondly, from an economical point of view the central cities have to deal with the loss of inhabitants and municipal revenue while at the same time providing and maintaining infrastructure facilities (Mäding 2001). Thirdly, urban planning has to cope with a growing urban sprawl and finally with a loss of attractiveness of the central city (Brake 2001, Hannemann/Läpple 2004). Above all, suburbanisation itself was enabled by an older (basis-) innovation: the automobile (Zapf 1986: 167, Hesse 2001).

## **1.2 The geographical context: Germany and the Netherlands**

In this paper, researching impacts of new household types on suburbanisation focuses on Germany and the Netherlands in particular because of a similar urban development. Phases of industrialisation and suburbanisation have taken place in an equal period of time and the circumstances of living resemble each other. However, the suburbanisation in the Netherlands is developed on a larger scale (Burdack et al. 2005b). From this future processes could be derived for Germany.

Because it is difficult to analyse the suburbanisation of two whole countries in detail, we focus on the federal state of North Rhine-Westphalia (Germany) and the Randstad region (The Netherlands). The decision for these regions relates to following criteria:

1. With 18 million inhabitants North Rhine-Westphalia is the most populous federal state of Germany and represents the highest population density (beside the city states). As a result of the early industrial development especially of the Ruhr Basin (coal-mining, steel-production) the urban growth started earlier than in other federal states. Similar effects can be seen in connection with the decline of these industries: suburbanisation, respectively the loss of inhabitants of the central city, began very early within North Rhine-Westphalia (Gramberg 1959, Clemens 1961, Ganser 1997).

Beside the Ruhr Basin, there are prospering cities such as Cologne or Düsseldorf. Since each has a University there is a high rate of single and two person households and they do not seem to be seriously concerned with the problems of suburbanisation. On the contrary, they still attract a high amount of households to move into their central city (Stadt Köln 2004, Office for Statistics and Elections Düsseldorf 2005). Because of these different types of cities results of the region North Rhine-Westphalia can be transferred to many other cities of (West-)Germany.

2. In the Netherlands, the region of Randstad will be focused. The Randstad, which is not its own federal state, stands for the economically most developed region of the Netherlands. It consists of a ring of cities with about 6 million inhabitants (about 40% of the total population) including the largest cities of the Netherlands: Amsterdam, Utrecht, Rotterdam and Den Haag. Parts of four provinces, Flevoland, Utrecht, as well as South and North Holland, belong to the agglomeration of Randstad. Important universities and the financial sector are located in Amsterdam and Utrecht. Therefore, both cities are comparable to prospering cities of North Rhine-Westphalia. The south of Randstad (Rotterdam and Den Haag) with its declining harbour industries resembles the Ruhr Basin. Again, Randstad represents a greater number of Dutch agglomerations.

As the (post-) suburban tendencies in Randstad are developed furthest within Europe, it can be expected to derive important information for a future development in Germany (Burdack et al. 2005b).

### **1.3 Current state of international research**

As the diffusion of new household types, especially by suburbanisation, will be analysed this chapter deals with current tendencies in the development of new household types and the city-hinterland-migration concentrating on Germany and the Netherlands.

In West Germany, as well as in the Netherlands, suburbanisation arose in the 1950's by the migration of mainly young families to suburban areas (Chapter 1.1). Caused by a rising requirement of larger dwellings and green surroundings this process was enabled by an increased individual motorisation (Hesse 2001). As a result, the birth rate in suburbia exceeded the birth rate of the central city (Droht/Dangschat 1985). In the 60's, companies

started to move to the urban fringe. Thereby, job-seeking households were additionally attracted to migrate to this area; from the central cities, as well as from other cities and more rural regions (Bähr et al. 1992, Gatzweiler 1982). At the end of the 70's, a tendency of reurbanisation emerged: the formation of new household types with their own needs and demands generated a new attractiveness of the central city (Droth/Dangschat 1985, Krämer 1992).

Lately, Strubelt (1998) states an enduring high level of suburbanisation in Germany. In the Netherlands, Bontje (2005) declares a similar development. The current tendencies in suburbanisation can be described in the following way: the spatial expansion and the housing density of the hinterland increase. People move from the central city to more distant areas and aside off main transportation routes (Aring/Herfert 2001). Similar to the central cities the closer hinterland notes only a very slow growth or even a loss of population (Kemper 1997, Federal Office for Building and Regional Planning 2000: 182ff.). Furthermore, in Germany, the social composition of migrating households as well as their migration motives have changed. Besides groups of people with a lower social status and non-German families, the portion of single and two person households migrating to suburbia rose up to 70% in some agglomerations (Aring/Herfert 2001). Apart from these general tendencies, there are regional differences in the social composition of the migrating households and in the extent of suburbanisation, i.e. the percentage of migration balance (Aring/Herfert 2001, Herfert 2001).

During the last decades the suburbanisation of the secondary, as well as the service sector got advanced and resulted in a suburban economical independency from the central city (Bontje 2005, Hatzfeld 2001, Kunzmann 2001). Aring (1999) describes this increasing autonomy of suburban areas as "postsuburbia".

Burdack et al. (2005b) state that within Europe the postsuburban tendencies are progressed furthest in the region of Randstad and thereby precede the regional structures of North Rhine-Westphalia. The Ruhr Basin, the region in West-Germany which is subject to the most intense economical and demographical changes, is not considered in recent research projects (Brake et al. 2001, Burdack et al. 2005a, Matthiesen 2002). Therefore, a comparison between Randstad and North Rhine-Westphalia is an important additional component of the current research and can contribute to describe postsuburban dimensions.

Regarding motives for moves from the city to the hinterland various data sets are available. During the last forty years, many cities initiated studies to identify the determinants of out-migration. However, systematic comparisons of the findings do not exist (Blotevogel/Jeschke 2004, Heitkamp 2002a, 2002b, Ismaier 2002, Jessen et al. 1978, Stadt Münster 2000). The meta-analysis of Bleck (2005) performed such a comparison and offered new evidence. It shows that migration motives concerning the familial situation or dwelling

clearly decreased in benefit of work-related and environmental reasons. Moreover, an interrelationship of municipal characteristics and the migration motives could be proven.

Although suburbanisation has been an important topic of research in the last four decades (ARL 1970, 1975, 1978, Brake et al. 2001a, Burdack et al. 2005a, Clemens 1961, Friedrichs 1985, 1997), the data basis for its analysis is restricted: there is a lack of systematically collected and spatially comparable data.

## 2 Suggestions for further research

Research on the impacts of new household types on suburbanisation should include research on individuals, households as well as migration flows which can be assigned to the micro-, meso- and macro-level (Tab. 1):

Contents of Research	
micro-level	Characteristics of migrating persons (sex, age, nationality)
meso-level	Types of households and their migration motives
macro-level	Migration flows for single cities and years in dependence on municipal characteristics (rate of unemployment, population density etc.)

(Source: Own design 2005)

1. On the micro-level, characteristics of the migrating persons are focused: which persons are involved in suburbanisation and what characteristics do they have?

Relating to official data age, sex and nationality of the city-hinterland-migrants can be traced since the 70's.

2. On the meso-level, household types can be related to their migration motives. Is a change of migration motives connected to the diversification of the migrating household types? Are there differences in migration motives comparing the Netherlands and Germany?

3. To provide a basis for studying the impact of new household types on suburbanisation it will be necessary to determine the degree of city-hinterland-migration on a macro-level. Although there is a huge amount of literature dealing with suburbanisation, quantifications of this process (for single cities and years) are rare. Even the municipal statistics seldom try to quantify this amount. To fill this research gap, the official data since the 1970's for a significant number of cities could be quantified. By combining these data with specific municipal characteristics (e.g. financial means, housing and labour market) it will be possible to find its stimulating and constraining factors and to answer the following

questions: does a high rate of urban unemployment intensify the degree of suburbanisation? Do sufficient financial means of a city diminish its degree of city-hinterland-migration?

To determine the dimensions of suburbanisation, respectively the spatial impact of new household types, as well as the independence of the suburbs it is necessary to develop a classification of regions. A distinction between three categories seems reasonable: the central city, the closer and the distant hinterland. Although the Federal Office for Building and Regional Planning has published criteria for this distinction, it is worth considering another classification. The criteria depend on commuter traffic statistics, e.g. the percentage of persons commuting from their home municipality to the central city (Göddecke-Stellmann/Kuhlmann 2000). But if commuter traffic is the basis for a classification, it will be difficult to demonstrate the spatial independence of suburbia.

For further research, data on the distribution of household types, on the flows of migration, as well as on migration motives are necessary. Data on household types, as well as on the flows of migration have to be acquired by different Statistical Offices (e.g. State Office for Data Processing and Statistics of North Rhine-Westphalia, Statistics Netherlands). For the completion of the existing migration motive studies, Dutch studies have to be obtained from different communities. Finally, the data have to be generated in a database.

Additionally, new household types should be linked to the process of suburbanisation. Therefore, their proportion within the regarded regional units (city and hinterland), as well as within the group of city-hinterland-migrants, has to be determined. Thus, household types can be classified in respect of their likeliness to migrate into the urban fringe.

Finally, the results of North Rhine-Westphalia and Randstad can be compared. It is assumed that the general tendencies regarding the development of new household types and suburbanisation are similar. Differences are anticipated in (post-) suburban characteristics which will be more developed in the Netherlands (Chapter 1.2).

### **3 Theoretical approach**

#### **3.1 Theoretical framework**

As the focus is on the regional diffusion of new household types migration theories are necessary. Since the end of the 17th century migration is a central topic of socio-scientific research. The earliest research was done by Ravenstein in 1885 (1972a [1885], 1972b [1889]). Since then, many different theories have been developed. For the purpose of this paper macro-theoretical models can be used to explain the influence of municipal characteristics on suburbanisation. Individual characteristics such as the needs and potentials of migrants will be focused on with the help of micro-theories. Especially the

influence of age, sex and nationality has to be analysed (Eisenstadt 1954; Saunders 1956; Hoffmann-Nowotny 1970, Speare 1970, Wolpert 1965).

The “Model of Life Cycle” (Lansing/Morgan 1955, Rossi 1980 [1955], Kemper 1985) has to be mentioned since it is one of the basic models dealing with life cycle related migration. It states that the “changes in needs generated by the life cycle changes become translated into residential mobility when the family dwelling does not satisfy the new needs“ (Rossi 1980: 179). Life cycle changes, for example job and family-related changes (e.g. end of education/start of working period, marriage, birth of a child, divorce), often correlate with specific age periods. Therefore, similar migration decisions of age-groups can be anticipated (Krämer 1992, Clark/Dielemann 1996: 27ff., see also Table 2).

*Table 2: Demands for dwellings in dependence on the Life Course*

Age Group	Life Cycle	Generalised pattern of demand
0 – 17 years	Teenager living with their parents predominantly.	No independent demand on the housing market.
18 – 29 years	Young adults forming their own household when entering working life.	High demand for small dwellings – concentration on the central city.
30 – 49 years	a) Traditional household types setting up a family. b) New household types, variety of needs, ongoing professional orientation.	a) High demand for larger dwellings, increasing number of homeowners in suburbia. b) High demand for dwellings in the central cities.
50 – 64 year	Job-related consolidation, stable life phase.	Minor mobility.
65 years and older	Increasing migration to old people’s homes, as well as to children and relatives.	Demand for age-related dwellings, disposal of mainly larger apartments in the hinterland.

(Source cf.: Trust Centre of Housing of Lower Saxony 2001: 35)

According to the model, 18 to 30 year old people move primarily due to their educational and professional career – mainly into and between cities. From the age of 30 to 50 needs and interests increasingly shift towards family concerns regarding traditional household types. Residential changes will follow in regard to a larger and more comfortable dwelling. This is often associated with city-hinterland-migration. Children under the age of 18 are seen as dependent movers which are linked to their parents’ migration decision (Böltken 1995). The interests of new household types depend more on their professional career and leisure facilities. Therefore, they primarily move to the central city. Between 50 and 65 years the likeliness to migrate is very low. Finally, after finishing their career elderly people (65 years

and older) mainly move closer to their children, relatives or to old people's homes in need of more support in daily life. These suggestions can also be proven by data from the annual survey of the Federal Office for Building and Regional Planning in respect to the migration motives (Böltken 1995).

In relation to sex only few differences are described in literature: young women tend to leave their parents' house earlier. Explained by their minor interest in a professional career the rate of migration declines already at the end of the 20's and thereby earlier than in comparison to men (Trust Centre of Housing of Lower Saxony 2001).

However, in regard to recent tendencies the "Model of Life Cycle" has to be adopted. Derived from postsuburban developments functional changes in the relation of the central city to its hinterland can be suggested (Chapter 1.3): with its rising independence the closer hinterland becomes the "new" central city while the remaining central city loses some of its functions (jobs, service sector). In addition, the distant hinterland functionally becomes the "new" closer hinterland (housing space, recreation). These changes have meaningful effects on the migrating households which will be described in detail in the following chapter.

### **3.2 Hypotheses**

In reference to the suggestions expressed in Chapter 2 and on the theoretical basis (Chapter 3.1) hypotheses can be developed according to the three levels of analysis: the micro-, meso- and macro-level:

1. The variety of migrating persons in reference to age, sex, and nationality increased in the last decade. In respect of changes in the "Model of Life Cycle" it is assumed that 30 to 50 year old people (and their children) are not longer the predominantly city-hinterland-migrants. Moreover, women are expected to get more interested in having a professional career and thereby the described differences between men and women will recede. Regarding nationality more foreign persons will take part in the city-hinterland-migration. Because of a similar social development in Germany and the Netherlands, expected differences between the two countries are not reasonable.

2. According to the "Model of Life Cycle" and many research results, suburbanisation is closely connected to familial and dwelling demands. As a result of preparatory work (Chapter 1.3) it can be demonstrated that the city-hinterland-migration motives have shifted towards job-related and environmental motives. It is assumed that the increasing portion of job-related motives can be traced to the new household types within the group of city-hinterland-migrants. In contrast to the motives of traditional household types, new household types are expected to attach more importance to job-related motives. Again, great discrepancies in the international comparison are not expected.

3. Following the literature the amount of suburbanisation – beside the specified variances in some periods (reduction in the 80's, new acceleration in the 90's) – is assumed to be still on a high level. Up to now, the exact extent is fairly unknown. Besides this, there will be differences between single cities. Parallel to the already known effects of municipal characteristics on migration motives an apparent impact of municipal variables on the migration flows (e.g. higher rents in the central city will generate a higher extend of city-hinterland-migration) is assumed by applying macro-theories. Combining the concept of postsuburbia and the “Model of Life Cycle” the following changes in the process of suburbanisation can be expected (Fig. 2):

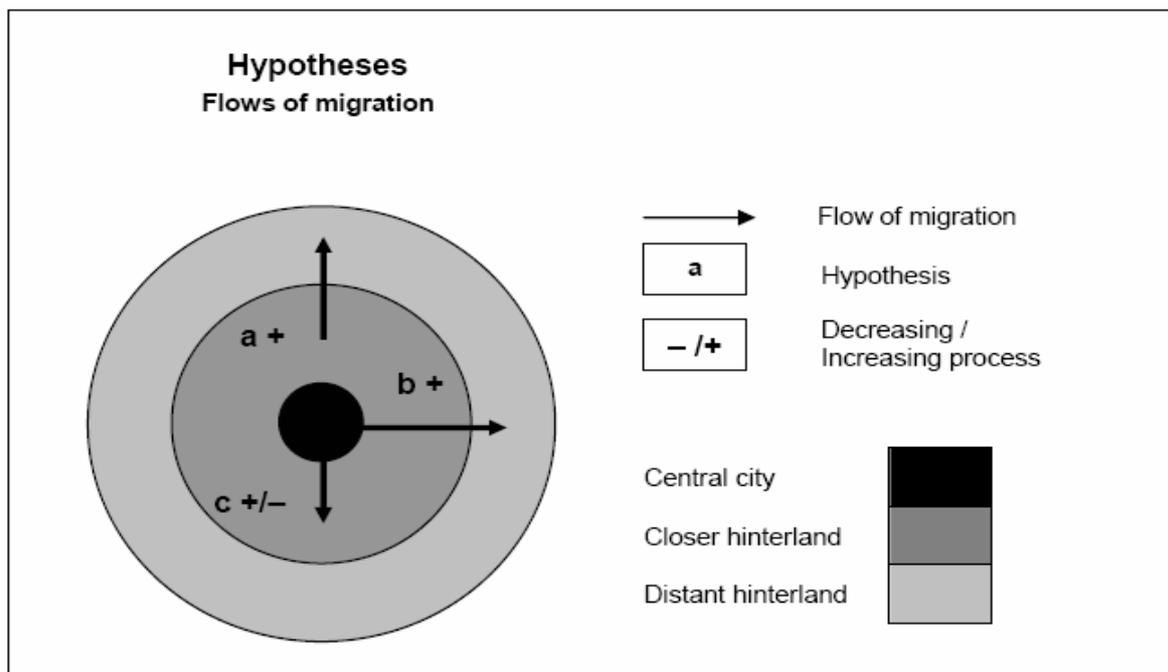


Figure 2: Visualisation of the hypotheses  
(Source: Own design 2005)

Traditional household types from the central city, as well as from the closer hinterland tend to move to the distant hinterland, the new suburbia. New household types start to leave the central city towards the closer hinterland, the new central city. Regarding the migration flows the hypotheses below have to be tested. On the bases of the migration motives studies and the amount of migrating persons under the age of 18 (which are assumed to be the children of traditional households) the diffusion of new household types into the suburban areas can be reconstructed.

- a. The portion of migrations from the closer to the distant hinterland increases.
- b. The portion of migrations from the central city to the distant hinterland increases.
- c. The portion of migrations from the central city to the closer hinterland remains stable (loss of traditional household types, gain in new household types).

However, the results will depend on the agglomeration that will be analysed. On the one hand, in prospering urban agglomerations such as the North of Randstad (Amsterdam, Utrecht) the central city will keep their functional importance. On the other hand, a more apparent shift of functions in agglomerations in decline is expected, for example the Ruhr Basin.

In the Netherlands the degree of (post-) suburbanisation is more distinctive than in Germany. Therefore, it can be assumed that the explicated hypotheses find a stronger confirmation in the Netherlands.

#### **4 Methods**

The methodological concept should include a three-level analysis whereby two different data sources can be used definitely. First, migration motive studies can be generated in a data-base and analysed with the method of meta-analysis. Secondly, official data on geographical mobility can be evaluated.

1. On the micro-level official statistics of migrants can be analysed. They offer information about the sex, nationality and different age groups (under 18 years, 18-25 years, 25-30 years, 30-50 years, 50-65 years and older than 65 years). A great advantage is that the data cover the years from 1976 onwards. Thus, the process of suburbanisation can be quantified in respect to the mentioned social groups since the 1970's.

2. On the meso-level motives of different household types should be focused. This could be based primarily on a meta-analysis of a collection of migration surveys.

The method of meta-analysis is a "statistical analysis of a large collection of analysis results from individual studies" (Glass 1976). Its aim is to summarise and compare all findings of one research area. Therefore, all comparable, but statistically independent primary studies have to be collected. Beside the actual findings (e.g. means, percentages, correlations) various relevant characteristics (e.g. number of cases, year of investigation) of the single studies have to be extracted. This information can be used as dependent (or moderator) variables to find explanations for variations and interrelations in the results (Wagner/Weiß 2006). Within the scope of the thesis "City-Hinterland-Migration in North Rhine-Westphalia. A Meta-Analysis" (Bleck 2005) all existing migration surveys from North Rhine-Westphalia (publications of results or original data sets) have been collected. Because some studies were realised for more than one city or different years two or more samples could be separated. As a result, 37 samples of migration surveys from 24 studies can be compared. This is comprised of access to the original data sets of 20 migration samples and to the corresponding publications of the empirical findings of the other 17 samples. Besides the motives, these studies include data on various socio-economic variables of the questioned households. Summarised, the database contains information

of nearly 40,000 different households. This information can be completed with additional migration motive studies from several cities of Randstad. Afterwards, these studies have to be adapted in the database to be comparable.

This allows studying migration motives in dependence on household types. Moreover, a number of the surveys offer information about the destination area (closer or distant hinterland) of the migrating households. Therefore, it can be differentiated between new and traditional household types.

3. On the macro-level a classification differentiating central city, closer hinterland, as well as distant hinterland is reasonable using official data on migration flows. A conceptual basis can be the “Model of Agglomeration” by Boustedt (1975) modified by the Federal Office for Building and Regional Planning (Göddecke-Stellmann/Kuhlmann 2000). Based on a regression analysis of official data a comparison between different cities can be accomplished. This includes comparisons on a national focus, as well as on an international one. First, different types of cities (prospering cities and cities in decline) can be compared. Secondly, similar types of cities will be analysed on a cross national basis.

The parallel use of both data sources (official statistics and the database of migration motive studies), as well as the three-level analysis of the development of new household types and suburbanisation will give a deeper insight in their dependency on each other.

It has to be emphasised that the compilation of a database consisting of German and Dutch migration motive studies is not only unique but will also give singular information about the diffusion of new household types. In addition, suburbanisation is a topic on which a large amount of literature has been published – but the object of investigation, suburbanisation itself, is insufficiently quantified.

## Appendix

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