

Hooimeijer, P., & Knaap, G.A. van der (1994). From flows of people to networks of behaviour. *Nederlandse geografische studies*, 173, 178-187.

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13.1 Introduction

Many of the contributions in this volume bear witness of dissatisfaction with population geography as a discipline of flows of people and of interest in the (behavioural) processes underlying these flows. It is surprising that this concern is expressed with respect to nearly every aspect of migration: the generation of pools of migrants, the distribution of flows, the consequences of selectivity of migrant groups, policies affecting population displacement, and the theory of spatial mobility. To what extent is there a common denominator in this concern and what directions for future research can be derived?

In her contribution on the dynamics in the generation of migrants, Mulder advocates a shift from studying the dynamics in age-specific patterns to analysing changes in age specific motives. Her noteworthy addition to this general statement is, that ... "this will not only enable us to better understand these dynamics, but will also reveal countervailing tendencies in one age group that would remain hidden otherwise". Her own contribution provides a perfect illustration. The seeming stability in the inter-regional migration of young adults in the Netherlands results from a (hitherto unobserved) decrease in migration for reasons of marriage or cohabitation which is compensated by an increase in migration for other reasons (education in particular).

Van der Knaap and Odé state in their overview of migration flows in Europe, that ... "many processes need to be mentioned to obtain a better understanding of the ... geographical distribution of foreign residents in Western Europe". They equate country-specific origin-destination flows to motives and opportunities for international migration. The (short distance) migration between neighbouring countries in Northwestern Europe is related to labour market exchange facilitated by cultural similarities, the flows from North to South are related to return motives enabled by the rise of employment opportunities in Southern Europe, the flows from Africa and Turkey to the EC countries to family reunification and formation being the only legal titles for settlement, the flows from Third World countries as asylum seeking on the basis of the Geneva Convention and the flows from East to West as economic migration surfacing as a result from the lifting of the Iron Curtain. Their reasoning is a clear example of combining macro-level (policy) responses to economical and political change with micro-level motivations for moving in the explanation of international migration. White also stresses these two levels by emphasizing that migration researchers should not only "be aware of the tenor of political debate within Europe, and ... be abreast of political events around the world that could trigger off the refugee flows" but also "turn back to questions of the migrants' own conceptualisations of opportunities, constraints, channels and networks, and ways in which mobility fits into their life projects and longer-terms objectives".

The need to turn from quantifying to qualifying migration is also evident in the study of the consequences of migration. Compton states that the effects of migration

"... go well beyond the simple mechanisms of change in population numbers and composition ... at least as significant is the impact upon the wider economic, social and political life...". One aspect is the reciprocal nature of causes and effects of migration. Poor economic and cultural performance leading to a 'brain drain', robbing the country from its human potential that is a requisite for economic, social and political development. Obviously migration also means the displacement of human (and often monetary) capital having important and often diverse effects in terms of efficiency and equity. As Warnes shows, recipient countries of retired migrants might collect the blessings without having to bear the burden due to the circulatory nature of elderly migration over the year and over the life course. The building of the 'Fortress Europe' by erecting tariff-walls is curbing the flow of monetary capital into Eastern Europe and will therefore produce a flow of human capital into Western Europe. Restraining this migration will increase the disequilibrium both in monetary and in human terms, leading to higher levels of both inefficiency and inequity in the short and the long run. On the other hand, investment in Eastern Europe could decrease polarisation at the European level in the short run and might be considered the price that Western European countries have to pay to secure their future wealth in the long run.

More generally policy measures are crucial in understanding population displacement, but the relation is an indirect one. As Hooimeijer and Heida put it, policies "... aim at structuring the context by offering opportunities and imposing constraints that either enable or restrict certain types of behaviour". Investment in housing, economic activities and transportation infrastructure as well as imposing constraints by residence permits, labour permits or curbing travel by requiring visa, redirect population flows at various spatial levels, calling for a much wider definition of population influencing policies, which includes the unintended outcomes of policy measures aimed at other goals than population redistribution.

Perhaps the most pervasive expression of the move from measuring to understanding migration can be found in the statements concerning the theory of migration. Many instances of doubt with respect to classical concepts can be found. White argues: "The idea of migration as a change of place of residence on a (semi-) permanent basis is becoming outdated and new conceptualisations of population mobility will be needed as the distinction between different forms of movement break down". Warnes argues for the retirement migrants, that a full range of intermediate options between the permanent, total displacement and the temporary, partial displacement has developed. De Gans takes this argument a step further by stating that what is usually considered a migration is just a specific measurement of processes that are continuous in space and time. His basic processes are interactions, structured into (spatial) networks on the basis of the frequency and/or the intensity of the interaction. Next he distinguishes between various forms of interactions: physical (activities), social (dependencies) and mental (identities). The classical conceptualisation of migration in de Gans' opinion obscures the complexity by assuming that these networks coincide both in place and time, while in reality they might be distinct both spatially and temporally.

Summing up, most of our empirical analyses and models deal with aggregated numbers of persons and events, using occurrence-exposure rates and distance-deterrence functions. In our conceptual models however, we refer to both macro-level

phenomena and micro-level decision making, but these levels hardly ever enter our analyses directly. Explanation in population geography has therefore increasingly become speculative. This leads to the question of how we can bridge this gap between the sophistication of our conceptual models and the barrenness of our empirical analyses.

13.2 *The concept of migration*

One of the problems of understanding a phenomenon 'from within' as De Gans set out to do, is that the image tends to become 'shattered'. The richness in detail can become so overwhelming that we lose sight of the phenomenon as a whole, and end up by (re)discovering its complexity. The next step is to define a number of general principles that (re)create structure, even if this means that we ignore some details. In painting the wood we will have to decide which details we will select from our careful examination of the trees.

The first principle is that migration is a form of spatial mobility, having a close relation to other forms like residential mobility, workplace mobility and commuting. The classical conceptualisation of spatial mobility is, that it is a means (involving time and monetary costs) to an end. It is often referred to as instrumental behaviour. However, most behaviour is instrumental in the sense that behaviour is hardly ever a means in itself. The crucial aspect of spatial mobility is that it is a means to combine goals in space. It is the mechanism that brings about the match in the spatial interaction between nodes of activities. Spatial mobility is to geographers what price is to economists. Voluntary movement always brings a person or household closer to spatial optimum between various life domains located in space. The principle life domains are health, family, residence, labour, and leisure. Each of these domains might trigger and/or direct spatial mobility.

The second principle refers to the nature of the relation between various forms of spatial mobility and between spatial mobility and other forms of investment. This relation is one of interdependence which involves both complementarity and substitution. The classical example with respect to the substitution of spatial mobility and other forms of investment (of time and money) is the 'choice' between sedentary or nomadic living. Nomads substitute investment in travel (and mobile assets; animals) for investment in locations (and fixed assets; land). The classical example of complementarity is that decisions on residential mobility or workplace mobility always require a complementary decision on commuting. If we want to distinguish between residential mobility and migration as a different form of change in usual address, the issue of complementary action is crucial. Residential mobility could be defined as a displacement of the place of residence only, triggering complementary action with respect to transportation only and not to relocation of other forms of activities (such as workplace). Migration is then defined as a multiple relocation decision with respect to more than just the place of residence.

The third principle is the temporal setting of spatial mobility, distinguishing between daily, seasonal and life-time mobility. With daily mobility we usually mean the circular mobility in the various days of the week. Seasonal mobility refers to

circular movement over the year, which used to be common in some agricultural societies (transhumance) and is now more related to leisure (extended holiday-making). Life-time mobility does not usually involve circularity, although this might occur as for instance in return migration after retirement. Again the relation is one of interdependence. Decisions on life-time or seasonal mobility require complementary action with respect to daily mobility. Migration, defined as a multiple relocation decision, will be seasonal or life-time mobility (perhaps with the exception of some home-less).

The fourth principle is the spatial setting with respect to form and substance. Defining spatial mobility as the match in the spatial interaction between nodes of activities has severe implications for the form of spatial mobility. The correct geographical concept of space in which interaction takes place, is not territory or region but network. At the level of the individual household, daily life is organised in a series of (partially overlapping) spatial networks of the household members. If zonal structure does appear in the overlap of networks between households, this should be the outcome of research and not the starting point for analysis. The size and shape of the networks depend among others on the substance of the interaction, distinguishing between physical, social and mental interaction. Traditional concepts as activity space, social space and awareness space, fit into this distinction if formulated in terms of networks rather than as areas. The essential difference between these networks is not their spatial extension, but the way they are structured. Physical interaction is structured by activities, linked by means of transportation or communication, the two of which again are interdependent in terms of substitutability and complementarity. Social interaction is structured by dependencies between people, linked by transfers of resources (money, time, knowledge, etc.). Mental interaction is structured by images, which result from the processing of information. As migration involves the relocation of people, existing networks are not only directing migration, but are also reshaped by migration.

The fifth principle can be derived from the preceding ones directly. Defining migration as a multiple relocation in physical, social and mental networks of interactions, moving towards spatial equilibrium between various life domains located in space, implies that migration arises from the interaction between the individual and its context. Starting from a position of relative equilibrium, new disequilibria can arise because of endogenous change (at the level of the individual or the household concerned) or exogenous change (at the level of the context). Triggers for migration can therefore arise at the individual level (for instance migrating to enrol at university) or at the level of the context (loss of employment will trigger labour market search which might lead to migration). Constraints on moving on the other hand, might also arise at both levels. Constraints on labour opportunities limit the migration from Eastern to Western Europe, and the investment in 'location specific capital' like a social network may prevent someone to engage in total displacement.

In a methodological sense this means that although migration is individual behaviour, no *a priori* dominance can be awarded to either the individual or its context in studying migration. It also implies that the study of migration should start from (endogenous or exogenous) change in the various life domains of the individuals

concerned, as these domains define the ends that spatial mobility should combine in space. In the next paragraph we will deal with the individual, moving to the context in paragraph 4.

13.3 Micro-level methodology: life course analysis of spatial networks

The life course perspective perceives the individual as passing through a number of states with respect to various careers. Within each career the individual follows a path through life, in which various states are occupied and in which transitions between states can be related to events. Individuals differ because present behaviour is directed by past experience. Stated this way, the life course perspective bears a close resemblance with more traditional approaches. The first is the developmental approach, stemming from psychology in its original formulation, seeing the individual as passing through a number of successive stages in a fixed ordering, 'maturing' into new capacities. In sociology, this approach is reflected in the age-stratification model (Riley 1973). In migration research this approach is implicit in the model migration schedules (Castro & Rogers 1981) and explicit in the life cycle explanations of residential mobility (Rossi 1955) and retirement migration (Litwak & Longino 1987). The second approach is Freudian, (over)stating the role of the micro-biography in the explanation of present behaviour from early childhood experience. The concept of biographic continuity was introduced into sociology by Mannheim (1928) concentrating not on early childhood, but on the adolescence period of successive generations. In migration research this idea is most prominent in the concept of 'return migration', a major exception to the presumed isomorphism of De Gans.

Modern life course analysis differs from both these approaches. It lacks the normative connotations of the developmental approach. Normative stages are replaced by more neutral states from which people might move, but to which they might also return. It also lacks the strict biographic continuity of the Freudian or generationist approach. The restrictive idea of continuity has been replaced by the concept of the virtual biography (Birg 1987), stating that people over the life time will always be faced with making choices, but that their personal history is decisive in shaping their 'choice sets'.

A more essential difference of the life course approach with both the developmental and generationist approach, is added by Runyan (1982). He conceptualises the life course not just as a series of states separated by events, but as a series of interactions between the individual and its situations. From these interactions, both conflict and complementarity might arise. At the individual level, the state with respect to each career, determines the situation of the individual. Behaviour is a result of decision making, taking this situation into account. Two types of behaviour can be distinguished. Adjustment behaviour in which people adapt to a change in their situation, or adjusting behaviour in which people deliberately try to change their situation. Stated differently, people employ hierarchical decision rules, giving priority to one career over another. For instance, women might give up employment to have children, might decide to postpone having children to advance in their professional career, or might combine the two careers. The decision taken will depend on the aspirations of the

individual, making profession or family subordinate to the other, but also on the situation (e.g. the time and money budget of their partner).

Applying the life course approach to migration research, the principles of migration stated above, can be reformulated in life course terms. People occupy states with respect to various life domains (careers) that are located in space. A useful distinction in migration research, is the concept of triggering and conditioning careers (introduced by Mulder 1993). In many cases the trigger is formed by an event in one of the careers (for instance enrolment at university or the desire to cohabit with a partner might invoke the decision to leave the parental home) or, more generally, by a change in the interaction between the individual and the situation. Conditioning careers refer to both resources (enabling spatial mobility) and restrictions (hampering mobility).

As both restrictions and resources develop as part of careers, they can often be related to past decisions, for instance with respect to investment in (human) capital defining resources later in life, or with respect to lasting commitments leading to restrictions later in life when the situation has changed. Restrictions can be found in each of the three networks that define the situation of the individual in a spatial sense. The well-known constraints of Hägerstrand structure the activity space, patterns of dependencies and commitments structure the social network and the processing of information creates the perception of places that structures the awareness space, each of them imposing restrictions on spatial mobility by defining the extent to which people are not free to move. The same trigger, might therefore lead to various behavioural responses, due to the fact that resources and restrictions will vary between individuals. To understand migration in the sense of the complementary or alternative action with respect to the various forms of spatial mobility, one needs to look further than just the motive for migration defined from one (triggering) career, and also examine the resources and restrictions arising from other careers.

The life course approach to migration research can capture many of the principles of migration stated above. It is however specified at the level of the individual. The interaction between aspirations, resources and restrictions are defined at the level of the careers of the individuals, and does not explain how the wider social and/or spatial context influences these decisions. It does provide a clue, however, on the effect of contextual change on migration decisions. These decisions will hardly ever be influenced directly by the wider context, but indirectly by its effects on the various careers of the individual.

13.4 Markets: the macro-micro link

Migration behaviour will always be triggered by one of the careers. However, the triggering event can be exogenous to the individual. The most prominent examples are forced migrations, for instance residential relocation triggered by urban renewal; work-place relocations due to the closing down or relocation of firms; the search for asylum as a result of political persecution. Other events might increase the propensity to move, without necessitating it. Becoming unemployed does not imply a residential relocation, but might lead to speculative migration, trying to secure a new vacancy.

This will depend not only on the resources and restrictions at the individual level, but also on the opportunities and constraints arising at the macro-level.

The distinction between individual motives, resources and restrictions and the contextual triggers, opportunities and constraints is crucial in understanding spatial mobility. Endogenous change, triggering mobility, is the result of decision-making by the individual(s) involved. Individuals can not influence the exogenous triggers, opportunities and constraints, but these exogenous aspects do elicit responses. Both endogenous and exogenous determinants operate at the same time, which might help to understand why not every individual responds to exogenous change in the same way. The seemingly volatile behaviour might be understood from a more complete overview of all relevant aspects of both the individual and its context. This obviously raises the question of how to incorporate these divers aspects into one empirical analysis.

Behaviour with respect to each of the careers can be reformulated as market transactions. This is very obvious for residential relocation and labour mobility and can easily be extended to consumption of for instance health care, etc. Even partner choice has been formulated as a transaction on the 'marriage market'. Market research potentially bridges the gap between research at the micro-level, modelling individual decision-making (private choice) and research at the institutional level, zooming in on structures of provision (public choice). Institutional approaches to labour and housing research traditionally focus on the segmentation of labour and housing markets and can therefore generate the opportunities and constraints exogenous to individuals operating on these markets. Micro-level research traditionally focuses on the (stated or revealed) preferences of the individual for moving, often assuming some consumer-sovereignty, but can easily be extended to encompass the individuals restrictions and resources.

The most dominant triggers for residential relocation are residential stress, labour mobility and partner choice. In the Netherlands more than 80% of all changes in usual address are motivated by one of these three triggers. In each instance the actual behaviour can be conceptualised and modelled operationally as the outcome of market search. Search models have been constructed for labour market (Lippman & McCall 1976, Mortensen 1988), housing market (Aitken 1987, Hooimeijer & Heida this volume) and partner market (Montgomery et al. 1988) search. In general, market search models generate behaviour as the outcome of three conditional probabilities: the probability of being in search in a particular period and area, the probability of receiving an opportunity in this area in this period and the probability of accepting such an opportunity (Gordon & Vickerman 1982). Daily activities and life course experience define the intensity and geographical boundaries of search. Whether or not an opportunity will be accepted is the result of the individual's decision-making, but the individual can not decide that an opportunity will be offered (with the exception of the self-employed and perhaps self-help housing). Whether a dwelling or a job will be offered is decided by landlords and employers, whether a marriage proposal will be done or accepted is decided by the potential partner. Seen from the perspective of the landlord or the employer, the decision to offer the vacancy to an individual, is an acceptance of the potential dweller or employee. They operate on their own

market(s) and the decision to create new vacancies and the qualifications they require of (potential) occupants, can only be understood from their goals, resources and restrictions. Therefore, the opportunities and constraints exogenous to the potential dweller or employee, are also outcomes of (private or public) choice within its own context. In this way various contexts can be linked, offering the possibility to link individual search behaviour to issues of economic and/or political restructuring at the regional, national or even international level.

13.5 Conclusion

Defining spatial mobility as instrumental behaviour to combine various careers in space, and defining behaviour with respect to each career as the outcome of market-search, provides us with a powerful methodology to study migration. Life course analysis generates a very detailed description of the individual's aspirations, resources and restrictions, transcending the traditional developmental and cohort approaches in population geography. The acknowledgement that past experience and future expectations with respect to various careers can trigger and direct relocation behaviour introduces the flexibility necessary to not only understand, but also measure the determinants of this behaviour. Likewise market analysis provides us with a detailed description of the context (situation) of the individual. The availability and accessibility of opportunities on the various markets might be just as determining in triggering and directing spatial mobility as are the individual motivations, resources and restrictions. The creation and rationing of these opportunities do not belong to the subject of population geography, but of related disciplines as urban and economic geography. The responses of the population to (exogenous) changes in these opportunities in terms of the spatial mobility that is generated, however, do belong to the subject matter of population geography. Analysing these responses will not only enhance the explanation of past patterns of spatial mobility, but can also be used in simulations of the population redistribution within scenario's with respect to economic restructuring or changing structures of (housing) provision. This would contribute to the social relevance of population geography as a discipline.

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