

Why spending two hours a day commuting?
Deciding to become a long-distance commuter
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Introduction

Emerging practices in long-distance commuting undermine both the Zahavi conjecture and the classic analytical framework of Rational Modal Choice; and yet, few studies have explored the rationale behind this behaviour. While job opportunities and residential choice in part account for commute times, long-distance commuting seems first and foremost to be a way of reconciling personal and professional life, especially for couples in which both partners work. Hence is it the aim of this article to take stock of the rationale behind long commuting. We will begin by exploring the existing literature's contribution to the subject. After presenting our body of data, we will offer an explanatory model of long-distance commuting by highlighting strategies for reconciling personal and professional life.

Reappraising the Zahavi conjecture:

Economic analyses of commute times rely to a great extent on a hypothesis of constancy of daily transport time budgets (TTB) in urban areas. Given this constancy, time saved as a result of travel by automobile allows us to explain the increase in commute distances. The relationship between speed of travel, distance travelled and commute time is known as the Zahavi conjecture (Zahavi, Ryan, 1980; Zahavi, Talvitie, 1980). On average, some stability in terms of allotted daily commute times is observable.

Nonetheless, this conjecture is not useful in explaining the ensemble daily mobility behaviour, especially that of the home-work trip; on the contrary, in some instances it seems even to prove the opposite. We do indeed see an increase in TTBS today, owing essentially to a “growing number of long-distance commuters characterized by particularly high TTBS (more than 100 minutes)” (Joly and Littlejohn, 2007: 5). Joly and Littlejohn's work on this question combines a statistical approach and qualitative sociology to look at the specific case of long-distance commuters in seven French and Swiss cities. The researchers observed that individuals who spent more than 100 minutes commuting a day allotted “more time for mobility more easily. It seems as though resistance to allotting extra commute time lessens for commutes greater than 100 minutes” (Joly et al., 2007: 9), an observation that indeed counters the Zahavi conjecture.

Observation of commuting behaviours thus seems to cast doubt on the conjecture of constancy of commute time-budgets. Moreover, it reveals a category of commuters that is of great interest to researchers because of their unusual commuting behaviour.

Reassessing the classical rational actor paradigm

Indeed, for those with TTBs of an hour and a half or more, the probability of allotting more time for commuting was greater (Joly, 2005). As such, minimizing transport time did not appear as a criterion of modal choice for these individuals. The behaviour of “heavy” commuters thus also called into question the functional basis of modal choice models, which account for modal choice essentially based on the minimization of travel time and, to a lesser extent, commuting costs. The behaviour of long-distance commuters then seems irrational, from the point of view of Rational Modal Choice theory. This phenomenon thus calls the classical paradigm of travel behaviour into question. More broadly put, long-distance commuting calls the value ascribed to time and reasons for such large TTBs into question.

1. Literature analysis

Commute time is structured by residential context and job opportunities

“The association between residential context and travel times seems to be somewhat underexposed in the literature” (Schwanen et al., 2002:1487). Generally speaking, we might be tempted to believe that peri-urbanisation has given rise to longer commute times; in fact, the cause and effect relationship between the urban environment and commuting time is more complex. The gradual increase in distance travelled has been compensated for in part by an increase in speed of travel. Thus in Europe, though the distance travelled daily has grown since the 1960s, commute times have on the whole remained the same, thus confirming the Zahavi conjecture on a cumulative scale (Ilan et al. 1993).

Nevertheless, existing studies highlight three factors that influence travel time: the size of the city, its density and the urban structure. Thus does travel time from the centre tend to increase with the size of the city, while travel time for suburban inhabitants tends to decrease (Gordon et al., 1989). High urban density tends to increase travel time by car but reduce travel time by public transport (Levinson and Kumar, 1997). Finally, “commuting times by car in monocentric urban structures are longer than they are in polycentric or dispersed spatial structures (Giuliano and Small, 1993; Gordon and Wong, 1985; Gordon et al, 1989)”, (Schwanen et al, 2002: 1489). At the macro-social level, commute time can also be explained by residential location and modes of transport used.

Commute time is likewise structured by the job market. In the empirical literature, decisions to move closer to the workplace are in part determined by the employment opportunities (Pierrard, 2008), which are not equally distributed over a given region, with big cities tending to house a larger proportion of business activity and consequently available positions.

What is more, in a social context where unemployment is high, the geographical ‘terrain’ of positions acceptable to job seekers tends to grow. This enlargement of the potential employment playing field is even encouraged at the institutional level. In France, for instance, a job-seeker is obliged to accept a position provided that it corresponds to his skill set and if it is within 100 km of his home; refusal to do so could result in being struck from the list of job-seekers.

Finally, the information available to job-seekers is never without flaw. For this reason, individuals are not necessarily able to find the job they want close to their home. Thus does a certain percentage of long-distance commuters result from a mismatch between job-seeking individuals and jobs available (Van Ommeren and Van der Straaten, 2008). The combination of residential location and job location constitutes a framework for

long-distance commuters. Nonetheless, these structuring elements say little about how or why these long commute times are chosen and accepted.

Little known decision-making processes

Few recent studies have explored the process of becoming mobile.

The first, dealing with the four types of job-related long-distance spatial mobility, explores the process based on the influence of other people in decision making (encouraged or discouraged), the difficulty of making the decision and the likelihood of making the same decision again today. Finally, these elements were coupled with respondents' perception of their own mobility as well as that of their kin. The findings confirm the structuring role of employment in the decision to become mobile. It likewise seems that long-distance commuting is the most tiresome and restrictive form of the four types considered (Widmer et al., 2010). Nevertheless, the data available at present does not make an in-depth analysis of the decision-making processes necessary for understanding the different factors at play in the reaching of compromises possible. Above and beyond the economic pressure of finding a job and negotiating potentially life-changing decisions with kith and kin, what arguments, compromises and factors do long-distance commuters use when making the decision to commute?

Another recent study has contributed several avenues of reflection to the question of compromise (Ortar, Legrand, 2008). An implicit link is often established between long distance commuting and professional motives. Yet, other dimensions likewise make sense for long distance commuters in their decision to commute. Thus do the authors, using a qualitative methodology, point to the fact that professional and personal motives combine to form a tangled web – a web in which the decision to commute or have multiple residences is made. Of the personal motives, choice of residential location (country, region, or even a house) was of particular note. The choice between long distance commuting (returning home in the evening) and geographical celibacy (less frequent returns to the family home) was made according to the individual's stage in life, the presence of children (and their ages) and even the challenge of managing of two careers (for couples). Commuting can likewise be an alternative to residential relocation. In general, the decision to commute was not exclusively linked to professional motives but rather was a combination of career-related and family-related motives.

For this reason, we propose in this paper to look closely at the links between these two dimensions in order to better understand the decision-making processes that lead to long-distance commuting.

2. Data and methodology

Data on travel time budgets were collected in a European study called EuroCities DATTA managed by three teams: LET (Lyon, France), LaSUR (Lausanne, Switzerland) and GRT (Namur, Belgium)¹. As part of this study, a qualitative sociological survey of long-distance commuters was done in each of the three countries. Ten commuters were interviewed in each country in spring 2009. Interviewees were chosen based on their commute time (more than two hours a day). Commute time was such limited in order to reflect the time limit established in Joly's earlier study (Joly, 2005). The interviewees were recruited by network, then by snowball.

Subjects were asked about their travel behaviour, their feelings about this behaviour and their decision to become long-distance commuters. The qualitative method was chosen for its comprehensive dimension (Kaufmann J.C., 1996). The interviewer listened with empathy to the descriptions of the practices given by the interviewees. What is more, it was not the researcher who attributed meaning to the activities described by the subjects during the course of the interviews but the subjects themselves who gave meaning to their own ideas, as only they alone were in a position to do (Geertz, 1973; 2003). For this reason, the comprehensive method seemed the best way to bring out those aspects of compromise that were important for the interviewees and helped them make sense of their decisions.

Lisa	research assistant	31	F	Switzerland
Paloma	project manager	27	F	Switzerland
Sven	researcher	50	M	Switzerland
Robert	student	31	M	Switzerland
Monique	musician	61	F	Switzerland
Frédéric	engineer	29	M	Switzerland
Olivier	geologist	49	M	Switzerland
Antoine	radio technician	35	M	Switzerland
Michel	lobbyist	54	M	Switzerland
Adam	professor	50	M	Switzerland
Valérie	research/teaching assistant	39	F	Belgium
Amélie	project manager	30	F	Belgium
Pierre	official representative	52	M	Belgium
Dominique	mobility advisor	62	M	Belgium
Philippe	employee	33	M	Belgium
Emilie	research assistant	24	F	Belgium

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Cédric	contract researcher	34	M	Belgium
Frank	engineer	33	M	Belgium
Julie	teacher	31	F	Belgium
Eric-Emmanuel	administrative assistant	58	M	Belgium
Jean-Pierre	researcher	49	M	France
Gaetan	research director at the CNRS	36	M	France
Anne-Marie	associate professor	38	F	France
Florence	accountant	30	F	France
Loïc	associate professor	33	M	France
Juliette	project analyst	31	F	France
Marie	graphic designer	30	F	France
Patrick	technical project manager	34	M	France
Yoann	engineering project manager	27	M	France
Gilles	technical assistant	55	M	France

Table of interviewees

3. Results: Long-distance commuting: a happy medium between personal and professional life

When the workplace was far from the place of residence, households made choices between different forms of spatial mobility. It was not, however, simply a question of staying (turning down the new job) or going (moving closer to the new workplace) but rather finding solutions that fell somewhere between. And so the choice between relocation, bi-residentiality and recurrent forms of mobility like long-distance commuting was made (Vignal, 2005; Ortar and Legrand, 2008; Bertaux-Wiame, 2006, Kaufmann 2005). In order to understand how the choice to long distance commute was made, three factors must be taken into account.

Professional career

One factor, mentioned earlier in the literature review, was professional career. While it is true that career is important in understanding long-distance commuting, it alone does not explain this behaviour; other factors such as the couple, family or residential location, were also at play. Thus, instead of focusing on work-related factors alone, it is more accurate to look at them in combination with the two other dimensions in question: attachment to place and family life.

To begin, job opportunities are difficult to come by, to relocate or replace in a context of economic instability; thus does commuting allows individuals to continue to follow their career paths. In our survey this was especially true for graduates or individuals with highly specialized training. For these individuals, jobs were rare and, more often than not, located in cities and thus could be easily relocated in closer proximity to their place of

residence. Monique, for instance, a musician, found a job with the Lausanne Chamber Orchestra. Given the rarity of such jobs and working conditions in this particular orchestra being more or less favourable, she has little room for manoeuvre in terms of changing jobs. Anne-Marie is another example; after several years of searching, she managed to get the position of assistant lecturer she had been hoping for. She accepted the position, even though the job was in Paris and her family lived in Aix-en-Provence.

Anne-Marie's case highlights another aspect of the role career plays in choosing to commute; long distance commuting is easier to accept when the professional activity in question has been the object of a great deal of personal investment and commitment. Of the long-distance commuters we interviewed, several showed strong interest in – even passion for – their job. Jean-Pierre, an engineer by training, 'deliberately' accepted a job 100 km from his home just so that he could continue doing something he loved. Career focus therefore can make long commutes acceptable.

The last factor was job insecurity, which played an important role in the decision to commute. Long-distance commuting was preferable to a move when the job was insecure. Thus did Paloma, who lives in Yverdon and works in Geneva for an international organization, decide to commute rather than move, given that her contract was only for one year.

For short-term positions like this, this decision to commute can in part be explained by the incompatibility of time scales. Moving house, a relatively irreversible form of mobility, demands a long-term commitment (Kaufmann, 2005) and is, as such, incompatible with a short-term contract, which is reversible and whose outcome is uncertain; the decision to commute is more easily reversible in the event that a contract were to come to an end. Finally, choosing to commute rather than move allowed individuals to remain geographically rooted. With short-term contracts, this rooting becomes a form of stability vis-à-vis professional uncertainty. Paradoxically, long-distance commuters, who showed strong attachment to their places of residence, chose to be mobile on a daily basis precisely in order to *stay rooted*.

Attachment to residential location

Residential location was a fundamental aspect of the decision to commute. Our interviews confirm the findings of Ortar and Legrand's study on highly mobile individuals (Ortar and Legrand, 2008). More than *choice* of residential location, *attachment* to this location was of great importance to long-distance commuters. This attachment hides other dimensions which, nonetheless, are not mutually exclusive.

The first aspect of this attachment is social: long-distance commuters prove extremely attached to social and family networks close to their place of residence. Social and family networks played a crucial role in the desire to remain in a certain location, especially when the individual was born there.

Moreover, the presence of close relations facilitated the day-to-day managing of long-distance commuting, particularly when it came to children. Our study confirmed the importance of mutual assistance in terms of child care by nearby relatives, friends or neighbours (Willmott and Peter, 1962; Bonvalet and Maison, 1999; Vignal, 2005). For long-distance commuters, leaving a familiar residential location meant losing this support. In the same regard, help from close friends and relatives facilitated, even made long-distance commuting possible. Valerie's neighbour, for instance, looks after her children from the time they get out of school until Valerie gets home from work in the evening. On occasion, when she is late, she takes comfort in knowing that her children are at their 'third grandmother's' house.

The second type of attachment has to do with sensitive/aesthetic aspects. Long-distance commuters put a great deal of emphasis on the sensitive and qualitative aspects (having to do with the home itself as well as the surrounding environment) of their residential locations:

I live in a place called "the door to the Ardennes", and that's exactly what it is: forests. We really love it – we're in the country, close to the woods. We leave our house and in two minutes we're in the woods taking a walk, mountain biking or horseback riding. That's why. Plus, we have an exquisite home. (Valerie)

Thus did Valerie highly esteem the verdant region in which she lives, a region conducive to all sorts of outdoor activities. Monique likewise talked about her beautiful home in Bern (Switzerland), a 150 m² house that is a registered historical site.

Long-distance commuters also become attached to their place of residence due to the activities they develop there. Valerie loves where she lives all the more because it allows her to raise and ride horses; Paloma refuses to leave her home in Yverdon to move closer to her workplace because moving house would make it impossible for her to pursue her political career:

Political commitment is dear to my heart. And, more and more, I would like, I am finding I have a certain degree of ambition; in three years I would like to run for deputy in the cantonal elections...Otherwise, when you change districts – imagine, for instance, that I moved to Morges, I'd have no chance of being elected. That may sound really electioneering, but no one would know me there so I'd have no chance of getting elected deputy...So no, that's why I'd prefer to stay here. (Paloma).

Some activities strongly linked to residential location are not transferable. This form of cultural attachment also curbs relocation and thus favours the decision to long-distance commute.

Finally, in two of the three countries studied, attachment to residential location also had a linguistic dimension. In Switzerland, like Belgium, the language barrier that divides the country also acts as a non-negligible constraint to relocation.

Attachment in all its forms helps us understand situations that would otherwise seem irrational and incomprehensible from the point of view of Rational Modal Choice (for instance, couples in which both partners commute, or families in which one partner commutes a great distance even though the other partner is not employed). Amélie commutes two hours a day to her job in Belgium; her partner works in Luxembourg. Pierre and his family moved to the Chambéry region because of strong aesthetic and social ties, though only Pierre works...in Lyon. In both situations, the individuals in question preferred enduring long commutes in order to live in a place they felt attached to, even if it meant more time spent commuting.

These ties – aesthetic, social and cultural – were likewise strengthened by a rejection of the region of potential relocation (due to proximity to the workplace). Earlier studies have called this the ‘repulsion’ effect (Ortar and Legrand, 2008). Like attachment, repulsion takes on aesthetic, social and cultural dimensions, thus strengthening attraction to the current living place (via repulsion for the potential living place) and favouring the decision to long-distance commute.

Conjugal/family compromise

The third and final factor in the decision to commute was conjugal and/or family life, with attachment to residential location demonstrating the importance of sharing a common living space for the couple and/or family.

Long-distance commuting sometimes was the result of a family decision, in which case it was most likely considered the best solution for reconciling career obligations and constraints linked to family life. Of these, two in particular grabbed our attention because of their relevancy in the context of today’s family and demographics.

To begin, in some cases, long-distance commuting was directly linked to care giving for aging parents. Eric-Emmanuel, for instance, works in Brussels but lives near Namur (Belgium), where he moved in 1999 to live with his aging parents:

I’m single but I’ve got to take care of my parents. So I built a house there...My father gardens quite a bit, so he uses the garden and grows vegetables, despite the fact that he’s 87 years old. And my mother, she was already a bit sick – Alzheimer’s – so she needs lots of looking after. (Eric-Emmanuel)

Some divorced fathers also chose to commute rather than move in order to stay close to their ex-partners, who had custody of the children. This was the case for both Adam, who lives in Lausanne but works in Neuchâtel (Switzerland), and Antoine, who lives in La Chauds-de-Fond and works in Lausanne (Switzerland):

Even though I don’t live with them...for me, anyway, it’s important to live close by. If I go collect him or my ex-wife brings him to my house, she can walk here. I don’t need to always take...anyway, for me, it’s very important to stay close. (Antoine)

While these two scenarios may seem anecdotal, they nonetheless point to important trends in the evolution of society: the aging of the population and dependency of elderly individuals and the weakening of conjugal ties, rise in the divorce rate and family recomposition. On both counts, we could legitimately enquire as to what their impact on recurrent spatial mobility will be in the years to come.

Secondly, commuting can also be a way of reconciling the problem of geographically distant workplaces (for couples) and a family living place. Thus is it first and foremost a geographical compromise, as it allows the couple to reconcile two professional activities that would otherwise be difficult to relocate or transfer. This was especially true for highly educated individuals, for whom job opportunities are rare and generally unequally distributed within a given region (Vincent et al., forthcoming). This conciliation between professional life and shared living space also help us understand situations wherein both individuals in a couple commute. Paloma, for instance, who works in Geneva (her husband in Fribourg) and live in Yverdon. Commuting makes it possible for them to keep their respective jobs and nonetheless live together.

Commuting likewise makes it possible for individuals to avoid losing a job due to a family relocation. When Anne-Marie got the job she wanted in Paris, she carried on living in the south of France with her family to safeguard her husband's job as a business owner in Aix-en-Provence.

Choices concerning ways of living at the personal level (living together, sharing a common living space day-to-day, etc.) are more easily understood when considered in conjunction with decisions regarding spatial mobility. The option of having two separate residences came up very little in our survey, in part because of attachment to a common residence and in part because bi-residentiality is oft times interpreted as a weakening of conjugal bonds. For commuters, living together is an ideal of family life, in spite of long commutes to and from work. Which is why Pierre, for instance, preferred spending almost four hours a day in transit so that he could see his children in the evening to living close to his work during the week and not seeing them grow up.

Decisions leading to long-distance commuting are an unstable balance, especially in terms of conjugal compromise; as a compromise, both partners are never fully satisfied. This in turn can lead to major frustrations for both commuter and partner alike. A decision might then be re-evaluated in favour of changing of jobs, family relocation or bi-residentiality. Other, more extreme decisions (such as changing professions or accepting a lower position) may also be made. Separation likewise is a way of deciding to put long-distance commuting to an end.

Factors at play

The three dimensions presented above function inextricably; the decision to long-distance commute brings all three (professional, family/conjugal and residential attachment) into play.

Cedric is a contract researcher in Namur (Belgium). Married and father of a 4-year old, he lives with his family in the Liège region in the village where his wife, Karine, was born and to which she is very attached for both social and aesthetic reasons. What is more, Karine's parents live close to the village where Cedric and Karine live and can take care of their son when necessary. Karine works as a teacher close to their village. In making the decision to long-distance commute, it was his professional goals that encouraged Cedric to take his current job. Mobility-wise, the relative instability of Cedric's job compared with the relative stability of that of his wife strongly weighed in favour of commuting, as did the presence of the extended family support. For these reasons, Cedric decided in favour of commuting.

This example effectively illustrates how professional, family and conjugal dimensions become intertwined with attachment to residential location in the decision to long-distance commute. For Cedric, long-distance commuting was the only way of keeping the job he loved – however far away and however unstable – *and* maintaining his personal/family life. And so it seems that long-distance commuting is a means for reconciling the various dimensions of professional life and personal life, be they conjugal, familial, social, residential or cultural.

Conclusion

In the literature, the occupational dimension is often used to explain the rationale behind long-distance commuting. Long-distance commuters are obliged to travel great distances during long periods of time each day in order to get or keep a job. And yet, when taken independently of family and conjugal life, job alone does not explain the behaviour of long-distance commuters; other factors likewise are structuring in the decision to commute. For one, it is an anchoring logic that can take the form of social, sensitive or cultural attachment to a residential location. The decision to commute is also a joint decision, made as a family or couple, allowing for residential proximity to family members, partners, children or aging parents) and result from the conjugal decision to maintain a common living space and two geographically distant professional activities. Thus, neither residential context nor job opportunities alone account for the practice. Without regard to the conjugal or family dimension, which, to our mind, is the key to understanding this process, the framework accounting for long-distance commuting remains fragmented.

Long-distance commuting has become a means for reconciling different aspects of life (geographical distance, attachment, job and family) that are otherwise reconcilable only with great difficulty. Long-distance commuting is inherently a compromise and thus highly restrictive; the complexity of factors of choice leave little room for manoeuvre for commuters. These findings will certainly contradict many choice mobility theories that regard it as an opportunity and, ultimately, positive. While recurrent forms of spatial mobility (like long-distance commuting) allow individuals to seize professional opportunities, they also result from Cornelian choices and personal sacrifice and, as such, are not proof of a world in which everything will be mobile and smooth flowing; rather they remain marked by social coarseness and rigidity due to the difficult decisions that structure them.

It is likewise interesting to note that the decision to commute often favours attachment—geographically, affectively, socially and family wise. Whatever the reason for the decision to relocate rather than commute (and vice versa) residential choice seems to be a decisive factor. Because of geographical and affective attachment, recurrent and reversible mobility is preferable to less reversible forms of mobility such as moving house. As such, we can posit that all forms of commuting paradoxically are in fact an expression of strong family and geographical attachment in a context where both individuals work and jobs are hard to come by. Long-distance commuting thus is at the centre of dialectic between rooting and mobility, the paradox being that some commuters commute in order to be *more* sedentary (Kaufmann, 2008: 21).

Finally, the decision to long-distance commute calls into question the evolution of the Zahavi conjecture as it stipulates the stability of travel times. And yet, if long-distance commuting can be explained by the many ways of reconciling personal and professional life, we can hypothesize that similar such solutions will only continue to grow in number in the future. In a context where both partners have professionally careers, the population

is aging and conjugal ties are growing weaker, family-related motives for long-distance commuting foreshadow an increase in long-distance commuting and possibly even transit times in the future.

References

- Bertaux-Wiame I, Tripiet P, 2006, *Les intermittents du foyer, couples et mobilité professionnelle*, Cahiers du genre n°41, Paris, L'Harmattan, pp.49-74.
- Bonvalet C, Maison D, 1999, « Famille et entourage : le jeu des proximités », in Bonvalet C, Gotman A, Grafmeyer Y (Eds) *La famille et ses proches. L'aménagement des territoires*, Paris, PUF, pp. 27-69.
- Geertz C, 1973, *The interpretation of cultures*, New York, Basic Books.
- Geertz C, 2003, « La description dense. Vers une théorie interprétative de la culture » in Cefaï D (Ed), *L'enquête de terrain*, Paris, La Découverte, pp. 208-233.
- Giuliano G, Small K A, 1993, "Is the journey to work explained by urban structure?" *Urban Studies* 30, pp.1485-1500
- Gordon P, Kumar A, Richardson H W, 1989, "Congestion, changing metropolitan structure and city size in the United States", *International Regional Science Review* 12, pp. 45-56.
- Gordon P, Wong H L, 1985, "The costs of urban sprawl: some new evidence" *Environment and Planning A* 17, pp. 661-666.
- Ilan S, Bovy P, Orfeuill J-P (Eds.), 1993, *A billion trips a day, Tradition and Transition in European Travel Patterns*, Kluwer Academic Publishers.
- Joly I, 2005, *L'allocation du temps au transport – De l'observation internationale des budgets-temps de transport aux modèles de durées*, Thèse de doctorat, Université Lyon Lumières.
- Joly I, Littlejohn K, 2007, « les temps de transport : double regard des approches sociologique et économétrique », communication présentée lors du 7^{ème} colloque du groupe de travail « Mobilités spatiales et fluidités sociales », GT 23 de l'AISLF, 29, 30 et 31 mars 2007, Namur.
- Kaufmann J-C, 1996, *L'entretien compréhensif*, Paris, Nathan.
- Kaufmann V, 2005, « Mobilités et réversibilités : vers des sociétés plus fluides ? », *Cahiers internationaux de sociologie*, 118. pp. 119-136.
- Kaufmann V, 2008, *Les paradoxes de la mobilité, Bouger, s'enraciner*, Lausanne, Presses polytechniques et universitaires romandes.
- Levinson DM, Kumar A, 1997, "Density and the journey to work", *Growth and Change* 28, pp. 147-172.
- Ortar N, Legrand C, 2008, « Caractéristiques de la surmobilité professionnelle en périurbain, incidences sur les transports et le logement », *Espaces sous influence urbaine*, Certu, Rapport de recherche.
- Pierrard O, 2008, "Commuters, residents and job competition", *Regional Science and Urban Economics* Volume 38, Issue 6, November 2008, pp.565-577.

- Schwanen T, Dijst M, Dieleman F M, 2002, “A microlevel analysis of residential context and travel time”, *Environment and Planning A*, volume 34, pp. 1487-1507.
- Van Ommeren J N, Van der Straaten W, 2008, “The effects of search imperfections on commuting behavior: evidence from employed and self-employed workers”, *Regional Science and Urban Economics* 38 (2), pp. 27–147.
- Vignal C, 2005, « Les espaces familiaux à l'épreuve de la délocalisation de l'emploi : ancrages et mobilités de salariés de l'industrie », *Espaces et sociétés*, n° 120-121, pp. 179-197.
- Vincent S, Viry G, Kaufmann V, forthcoming, *Carrières académiques: comment concilier mobilités spatiales et vie de famille ?* Revue Synergies. Pays Riverains de la Baltique. Revue du GERFLINT.
- Widmer E D, Viry G, Kaufmann V, 2010, “The process of becoming mobile” In: Collet B Schneider N, *Mobile Living across Europe. Volume II. Causes and consequences of job-related spatial mobility in cross-national perspective*, Leverkusen-Opladen: Barbara Budrich.
- Young M, Willmott P, 1962, *Family and Kinship in East London*, London: Institute of Community Studies then Pelican.
- Zahavi Y, Ryan J-M, 1980, « Stability of travel components over time », *Transportation Research Record*, 750, pp. 19-26.
- Zahavi Y, Talvitie A, 1980, « Regularities in travel time and money expenditures », *Transportation Research Record*, 750, pp. 13-19.