

## 1. Essential Reading



# The Hypothesis of the Mobility Transition

By Javier Caletrío (Sociologue)  
10 December 2015

Written forty five years ago, "The Hypothesis of the Mobility Transition" prefigures aspects of the mobility turn and outlines the kind of macro systemic approach to transitions that scholars today have identified as a blank spot in the research agenda.

---

## The Hypothesis of the Mobility Transition

Wilbur Zelinsky, *Geographical Review* , Vol. 61, No. 2 (Apr., 1971), pp. 219-249

Transition studies develop analytical lenses sensitive to the coevolution of social and technological processes so as to better understand how to steer them along more sustainable trajectories. But given the multifaceted nature of transitions, this analytical capacity has been somewhat constrained by the limited range of expertise and knowledge originally involved in transition debates, namely innovation studies, institutional economics, and social studies of science and technology. This is changing rapidly, however, as voices across the social sciences and humanities are being lured into a topical, urgent, and thriving dialogue. A desired aim of this joint effort is to broaden not only the empirical focus of transition research but also its conceptual and methodological tools. For a field which describes itself as 'emerging' (Markard et al. 2012), it may then seem surprising to many that insight for such an urgent task could come from a paper published forty five years ago. Yet The Hypothesis of the Mobility Transition remains an inspiring early attempt to understand the interrelated, sequential nature of key social processes. Incidentally, the article also conceptualises mobility in a way that prefigures key tenets of the mobility turn

## The Hypothesis of the Mobility Transition

Zelinsky's argument is that mobility is a defining feature of modernity and one can find regular patterns of that mobility in time and space. This formulation is accompanied by eight statements broadly outlining the nature of the transition dynamics. Before presenting these in detail it is worth considering the context and the motivation behind the elaboration of the hypothesis. Zelinsky's point of departure is the observation that while much had been written about the capacity to harness and transform Nature during the industrial era, little had been said about the extraordinary increase of mobility, 'despite its rich potential for interpreting the larger phenomenon of modernization' (p. 223). In thinking about ways of studying this he is inspired by combinations of research in geography that had produced new insights about the spatial patterning of social and economic life. He wondered whether original combinations of existing areas of research could also enhance understandings of mobility and modernity. In particular, his hypothesis of the mobility transition blended insights from demographic transition theory, the principle of economic optimization, the notion of spatial diffusion of innovations, and a number of migration hypothesis consisting of 'loosely related, general empirical statements describing migrational relationships between sources and destinations' (p. 220). The result was an innovative conceptual framework relating forms of mobility to development stages in a society.

Central to his argument is a five stage demographic transition: (1) The premodern traditional society (mortality equals natality in the long term and population remains stable), (2) The early transitional society (slight increase in fertility is accompanied by a sharp drop in mortality and the population increases rapidly), (3) The late transitional society (the population continues to increase but at lower rates than in the previous phase due to a decline in fertility, slow first, rapid later, and a slowing decline in mortality), (4) The advanced society (after a marked decline, the evolution of fertility flattens and remains at low levels. Mortality rates start to converge with fertility in the medium and long term and the population stabilizes or grows at a low rate), (5) A future super-advanced society (difficult to make plausible predictions but it is sensible to expect careful birth management informed by personal (individual) and political objectives. Mortality may decrease slightly but not significantly).

Zelinsky suggests that similar sequential patterns can be found in other processes. He is most concerned with the mobility transition, but he also lists others (an educational transition, an occupational transition, a residential transition, and others still un-named) and regards these as inextricably related. 'Various strands of modernization processes represented by individual transitions are mutually interdependent' (p. 229). A key challenge for the researcher is not only to describe each of these dynamics but, most importantly, to examine their relationships in an explicitly spatial manner. 'The fusion of the spatial with the temporal perspective', he argues, 'would seem especially intriguing' (p. 220). In examining the mobility transition Zelinsky follows the same temporal structure that has been developed for the demographic transition and argues that a close relationship exists between these five stages and patterns of mobility in societies undergoing processes of modernization: (1) The premodern traditional society (mobility is short distance and gravitates around the locality), (2) The early transitional society (rural populations begin to migrate to cities and frontier lands (when available) and there is a significant increase in the range and intensity of other forms of mobility that Zelinsky calls 'circulations'), (3) The late transitional society (migration to the city and frontier lands continues but at lower intensity. Migration beyond the national frontier almost stops and other forms of mobility within the national boundaries grow in intensity and complexity), (4) The advanced society (rural exodus continues but has decreased in absolute and relative terms. By contrast there is high mobility of workers from city to city and a major

flow of unskilled workers from less developed countries. International flows of skilled workers grow selectively according to specific conditions. Circulation grows significantly, especially tourism and other leisure related travel), (5) A future super-advanced society (almost all residential migration may take place within and between cities. Circulation may intensify and perhaps diversify with new forms, and both internal and external movements may be subject to stricter political control).

## **Hypothesis of the mobility transition and eight related statements**

'The hypothesis of the mobility transition', Zelinsky argues, 'can be expressed most succinctly as follows':

'There are define, patterned regularities in the growth of personal mobility through space-time during recent history, and these regularities comprise an essential component of the modernization process.'

This formulation is accompanied by eight statements:

(1) A transition from a relatively sessile condition of severely limited physical and social mobility toward much higher rates of such movement always occurs as a community experiences the process of modernization

(2) For any specific community the course of the mobility transition closely parallels that of the demographic transition and that of other transitional sequences not yet adequately described. A high degree of interaction may exist among all the processes in question.

(3) There are major, orderly changes in the form as well as in the intensity of spatial mobility at various stages of the transition-changes in function, frequency, duration, periodicity, distance, routing, categories of migrants, and cases of origin and destination.

(4) There are concurrent changes in both form and intensity of social mobility and in the movement of information, and under certain conditions the potential migrant may exercise the option of changing his locus in social space or of exploiting a superior flow of information rather than engaging in a territorial shift.

(5) At a fairly high level of generalization, which dampens out minor spatial and temporal irregularities, we can recognize in mobility conditions coherent patterns that propagate themselves onward through time as successive periods and outward through space as concentric zones emanating from successful growth points.

(6) The processes in question tend to accelerate in spatial and temporal pace with time, apparently because of the steady accumulation and intensification of causative factors within any given community and because of information and effects transferred from more advanced to less advanced regions.

(7) Thus the basic spatiotemporal scenario of change may be preserved, yet be noticeably modified when a region initiates its mobility transition at a late date, so that absolute dating is a significant consideration.

(8) Such evidence as we have indicates an irreversible progression of stages.

## **Criticisms**

The hypothesis of the mobility transition is a diffusionist model that assumes that mobility experiences spread gradually from relatively developed areas to less developed areas. Empirical evidence seems to support this and at this basic level the model is widely accepted in migration and development studies. Nonetheless the hypothesis of the mobility transition has also been criticised for its a-historical character and universalistic ambitions. The reality is that not all societies undergo similar processes in a linear fashion. Migration and development affect different places in multiple ways.

It should be noted, however, that Zelinsky seems to have anticipated criticisms that would be made to this model. He warned the reader that 'the question of scale is crucial' to understand properly the virtues and limits of his model. He observed that:

The mobility transition is intended as a highly idealized, flexible scheme that affords a general overview of variety of places and periods. It is aloof from 'accidents' or exceptional circumstances; it is of little help in describing or predicting specific patterns of migration or circulation for a particular small area or set of areas over a brief period; it is deliberately vague in indicated distances, elapsed time and rates. But if geography and history are viewed in extremely soft focus through the lens of the hypothesis, it may have value in whatever broader insights are forthcoming. (p. 229)

## **Challenges of studying the mobility transition: conceptualising mobility**

Zelinsky was also well aware of serious conceptual and methodological difficulties in providing evidence for the mobility transition. Conceptually the difficulties stem from his comprehensive understanding of mobility which includes both physical and social mobility. Under the banner of social mobility he includes the traditional sociological understanding of social mobility as mobility along the social ladder, as well as mobility of information and ideas, movement between religious allegiances, political loyalties, and gender identities, and, besides all these, what he regards as 'the greatest of the new mobilities', the mobility of the mind (p. 225). This is enabled by newspapers, printing, phones, radio, television, libraries, museums, schools, theatres, concert halls. After all these innovations, 'There remains no effective boundary beyond which the nimbler mind cannot penetrate' (p. 225) A study of mobility in modernity, he argues, should examine social and physical mobility simultaneously: 'An increasing freedom of spatial movement is cause and effect of other forms of enhanced mobility', all are inextricably related (p. 225).

Zelinsky acknowledges that this broad conceptualisation of mobility poses methodological problems and hopes that in the future it will be possible to refine methods and produce data that enable the elaboration of a 'mobility index' that brings together measures of multiple dimensions (p. 224). Until this index exists, one is forced to rely on a measure of 'territorial mobility' as a 'clumsy surrogate' for the totality of social and physical mobility. But even territorial mobility poses difficulties. The conventional definition of migration (i.e. residential migration) needs to be combined with the variety of movements that he calls 'circulations': 'usually short-term, repetitive or cyclical that have in common a lack of declared intention of permanent or long-lasting change in residence' (p. 226).

## **Links with contemporary conceptualisations of mobility**

Readers familiar with the mobilities turn will notice similarities between Zelinsky's understanding of mobility and that of authors such as John Urry and Vincent Kaufmann. In his book *Mobilities*, John Urry argues that the reorganisation of social life towards more

complex combinations of face-to-face and at-a-distance, technologically mediated relationships stems from five interdependent 'mobilities' (Urry 2007: 47):

- The corporeal travel of people for work, leisure, family life, pleasure, migration and escape, organized in terms of contrasting time-space modalities (from daily commuting to once-in-a-lifetime exile)
- The physical movement of objects to producers, consumers and retailers; as well as the sending and receiving of presents and souvenirs
- The imaginative travel effected through the images of places and peoples appearing on and moving across multiple print and visual media
- Virtual travel often in real time thus transcending geographical social distance
- The communicative travel through person-to-person messages via messages, texts, letters, telegraph, telephone, fax and mobile

The parallels between these and Zelinsky's list of mobilities is evident, although Zelinsky's account is somewhat broader since it grants explicit significance to the figurative sense of mobility as freedom to roam through social spaces and trespass identity boundaries. However, rather than treating this as a different form of mobility, Urry regards it as a possibility emerging from the new conditions of everyday life constituted by those five mobilities. That is, in Urry's view the possibility to shape one's identity is increasingly related to the freedoms and constraints created by travel, information and communication infrastructures, i.e, the networked set of flows carrying diverse sorts of objects, bodies and information across the world.

Zelinsky's holistic notion of mobility also resonates clearly with Vincent Kaufmann's concept of 'motility' which refers to 'the capacity of entities (e.g. goods, information or persons) to be mobile in social and geographic space, or as the way in which entities access and appropriate the capacity for socio-spatial mobility according to their circumstances' (Kaufmann et al. 2004: 750). Central to this understanding of mobility is the potential for movement which may or may not be realized but which provides a sense of possibility. In Zelinsky's work this potential increases as a more sophisticated constellation of mobilities develops in each stage of the modernizing process. The hypothesis of the mobility transition speaks of a landscape of uneven propensities to move. Another parallelism between Zelinsky and Kaufmann concerns the intensification of circulation in later phases of modernization. Kaufmann and his colleagues note an increase in repetitive, long-distance journeys facilitated by ever more sophisticated travel and communication technologies. These 'reversible mobilities' (Kaufmann 2005, Ravalet 2012) are performed to avoid residential migration and may result in high levels of attachment to one's place of residence. Obviously this is a more restricted set of mobilities than those falling under Zelinsky's notion of circulation but it fits within a transitional sequence.

## **Concluding remarks**

Zelinsky's article remains largely unacknowledged in the 'mobilities' literature but has been widely discussed in demographic, development and migration studies. Besides showing that despite its postdisciplinary aspirations, the dialogue between mobilities and other fields is still highly selective, this inattention to Zelinsky's work may also reflect tacit dispositions to dismiss publications which are a few years old as 'outdated'. It is therefore not surprising that one of the first discussions of this text in relation to mobilities has been by Tim Cresswell (in the context of a project with the Mobile Lives Forum), one of the few 'mobilities' researchers who has consistently and systematically used historical sources.

Surely other texts and authors will eventually be brought to the attention of mobilities researchers in the near future providing an opportunity to deepen our understanding of unexpected connections to forgotten debates as well as missed opportunities for an earlier development of the field. Perhaps these texts will even provide inspiring conceptual and empirical insights for ongoing debates. This should certainly be the case of The Hypothesis of the Mobility Transition. Its suggestion that transitional sequences may underlie many processes constitutive or characteristic of modern societies (e.g. mobility, demographic, educational, residential, occupational) and that a relational approach should be adopted in examining any transition should be taken seriously. This claim is not new in transition studies. Calls to widen the focus of analysis to include longer historical periods, more explicit spatial analysis, and wider geographical contexts (e.g. supranational, global), as well as the relation between different but interdependent transitions (e.g. energy, food, housing, mobility) have repeatedly been made in print and at several academic events. Yet concrete, empirically rich research examples remain elusive partly because of the conceptual, methodological and logistical complexities involved, especially at a time when research funding is shrinking in many countries and, owing to new evaluation systems, the quality and originality of research is compromised by increasing pressure to publish.

A final word about historical research. Transition studies are often associated with an agenda for change, and the urgency of the present as well as institutional demands for 'high impact' outcomes may create a false dichotomy between basic and applied research. Zelinsky's text lacks an explicit normative concern and in this respect it is closer to the earlier historical studies by Frank Geels on, for example, shipping. However, it would be wrong to dismiss this as low priority research. Transition studies would be irrelevant without a sensitivity to long term dynamics founded on high quality, original historical research.

## References

Kaufmann, V., Bergman, M., Joye, D. (2004) Motility: Mobility as Capital, *International Journal of Urban and regional Research*, 28 (4): 745-56.

Kaufmann V. (2005) Mobilités et réversibilités : vers des sociétés plus fluides ?, *Cahiers Internationaux de sociologie* , 1 (18): 119-135

Markard, J., Raven, R., Truffer, B. (2012) Sustainability transitions: An emerging field of research and its prospects, *Research Policy* 41: 955-967.

Ravalet, E. (2012), [Reversible mobilities](https://en.forumviesmobiles.org/marks/reversible-mobilities-491), Dictionary, Mobile Lives Forum  
<https://en.forumviesmobiles.org/marks/reversible-mobilities-491>

Urry, J. (2007), *Mobilities*, Cambridge, Polity.

## Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

[En savoir plus](#) x

## **Movement**

Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the idea of simply wandering, with no real origin or destination.

[En savoir plus](#) x

## **Motility**

[En savoir plus](#) x

## **Reversible Mobilities**

Reversible mobilities are forms of specific movement made possible by rapid transport network systems. They are made over long distances, with outward and return journeys that are undertaken closely together in time. They are also limited in terms of social mobility and their relationship with otherness.

[En savoir plus](#) x

## **Transition studies**

Transition studies are concerned with long-term processes of radical and structural change to sustainable patterns of production and consumption. It involves different conceptual approaches and adherents from a wide range of disciplines.

[En savoir plus](#) x

---

### **Associated Thematics :**

#### Theories

- [Concepts](#)
- [History](#)

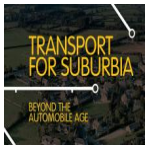


Javier Caletrío

Sociologue

Javier Caletrío is the scientific advisor of the Mobile Lives Forum for the English-speaking world (BA Economics, Valencia; MA, PhD Sociology, Lancaster) . He is a researcher with a background in the humanities and social sciences. In addition, he also has a strong interest in the natural sciences, especially ecology and ornithology. His research lies broadly in the areas of environmental change and sustainability transitions, especially in relation to mobility and inequality. Javier was based at the Centre for Mobilities Research at Lancaster University from 1998 to 2017.

The same author [See all publications](#)



**Transport for Suburbia: Beyond the Automobile Age, by Paul Mess**

Publication by Javier Caletrío



**Harnessing social tipping dynamics for the ecological transition: the case of the electric car**

Javier Caletrío



**Ecotourism: Is my flying saving the planet?**

Javier Caletrío

---

To cite this publication :

Javier Caletrío (10 December 2015), « The Hypothesis of the Mobility Transition », Préparer la transition mobilitaire. Consulté le 04 April 2025, URL: <https://forumviesmobiles.org/en/essential-readings/2993/hypothesis-mobility-transition>

---

Other publications





## History of the concept of mobility

Vincent Kaufmann



"We need to boost public transport supply and limit car use in order to reduce our emissions by 60% within 10 years"

Jean Coldefy



"Limiting the carbon footprint of mobility: what are the right policies for France?"

Jean-Baptiste Frétigny, Christophe Gay, Jean-Marc Offner



Let's plan for the final days of cars

Agathe Lefoulon, Sylvie Landrière, Christophe Gay

1 <https://en.forumviesmobiles.org/marks/transition-studies-2839>

2 <https://en.forumviesmobiles.org/marks/reversible-mobilities-491>