

Collective Thinking About Mobility Scales

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1.1. Introduction

In our globalized world, the coexistence, meeting, and sometimes friction between the different spatial and temporal mobility scales are permanent. Thus, contrasting forms of mobility coexist in a world perpetually in motion (Drevon et al. 2017). These movements, however, unfold according to different temporalities and spatial extents. At the one end of the spectrum are local and everyday mobilities; at the other are migrations characterized by uprooting and then permanent anchoring in a new social and geographic context. Between the two extremes are the more atypical or hybrid forms of mobility, such as large-scale work-related mobility, second homes, and temporary or seasonal mobilities. These different forms of mobility are distinguished by their contrasting temporal and spatial scales. Together, all these forms of mobility set the pace for our societies and punctuate the life journeys of individuals. Intertwining these different forms of mobility requires social science researchers to construct new ways of interpreting our societies, as proposed by Urry (2000) to describe and analyze contemporary societies through the prism of mobility.

However, approaches to the different forms of mobility that constitute the broad spectrum mentioned above remain fairly disciplinary. Thus, local daily mobility is most often studied by the socioeconomics of transport and urban geography, while migration and residential mobility are largely rooted in the field of demography. Atypical mobility, due to a lack of available data, is most often the domain of anthropology and ethnography. The fact that these different forms of mobility coexist within the same society requires a common approach for the different fields of social sciences in order to think collectively about the different spatiotemporal forms of mobility. This book attempts to meet this interdisciplinary challenge by offering a set of chapters from various disciplinary backgrounds in an attempt to document and describe most forms of contemporary mobility.

Collective thinking about the different spatial and temporal mobility scales is all the more important as the butterfly effects multiply, sometimes carried by long-haul flights from China. In fact, crises directly linked to mobility and referring to different forms of collisions of scales are occurring at an increasingly rapid pace: strong demand for the right to stroll in Istanbul's Taksim Square in 2013, a call to develop public transport rather than finance the Olympic Games in Rio in 2016, the rejection of speed limits and the carbon tax by the *Gilets Jaunes* in the winter of 2018 in France, a general strike in Chile following the increase in the price of a metro ticket in October 2019, reinforcement of migratory controls at the gates of Europe following the Syrian conflict, and finally, in 2020, forced immobilization of a large part of the planet to fight the spread of Covid-19 and the exit of the United Kingdom from the European Union. All spatial and temporal mobility scales are affected by these crises, as we can see: pedestrians and the ultralocal and the everyday, urban transport, the automobile and the national territory, air traffic, as well as residential and international migration.

In this general context, we are at an exciting moment for dealing with the spatial and temporal dimensions of mobility, especially since the major social science research traditions on mobility are still struggling to think of time and space together in a single, nondeterministic, and dynamic approach.

In this chapter, in order to delve into the topic, we propose discussing the history of the notion of mobility in social sciences, before returning to the understanding of the spatial and temporal scales of this phenomenon. After this conceptual and epistemological exploration, Chapter 1 ends by presenting the different contributions that constitute the key ideas of this book.

1.2. The notion of mobility in social sciences

The term “mobility” appeared in German, English, and French dictionaries in the 18th century to evoke mental agility and therefore the ability to change. It is therefore a question of:

Ease of change, of modification. Mobility of features, of physiognomy. Mobility of light, of reflections. Mobility of character, of mind, of imagination, ease of passing promptly from one disposition to another, from one object to another. Mobility of feelings, of mood. Mobility of opinions (Dictionnaire de l’Académie française du XVIII^e siècle)

The term mobility entered into the terminology of social sciences in the 1920s, with a double arrival: the work of Sorokin and that of the Chicago School.

In 1927, a Russian researcher who had emigrated to the United States, Pitirim Sorokin, published a book entitled *Social Mobility*, in which he laid the foundations for what was to become one of the most classic fields of investigation in sociology. He defines mobility as a change of occupation and identifies two types of movement:

- vertical mobility, which implies a change of position in the socio-professional ladder, which can be upward or downward (e.g., the worker who becomes his own boss);

- horizontal mobility, which refers to a change in status or category that does not imply any change in relative position in the social scale (for example, changing to a job with identical levels of qualification and remuneration). In Sorokin’s conception, mobility may involve space, but movement in geographical space has, in his opinion, meaning only through a change in status in the social space that it reveals or implies.

The work of the Chicago School in the 1920s and 1930s focused on the spatial dimension of mobility. Faithful readers of Georg Simmel, researchers placed the analysis of mobility in a dynamic analysis framework inspired by internationalism. While the interactions between the city, its morphology, and social relations are at the heart of the Chicago School’s work, their attention is focused, above all, on the social system, its functioning, its organization, and its transformations. Geographic mobility, whether residential or daily, is considered an integral part of urban life. The originality of this approach lies in the fact that mobility is thought of as a factor of disorganization or disruption of equilibrium, and therefore as a vector of change.

From the outset, this work has been concerned with international migration to the United States. In this respect, it is in line with researchers interested in migration phenomena who have proposed numerous “laws” and models, such as Ravenstein’s seven “laws” (1885), Stouffer’s (1940) models of attraction and repulsion processes, and Zipf’s (1946) model, which introduces the effects of distance into attraction/repulsion models.

At the start of the Second World War, the field of mobility was already divided between sociological research, which defined mobility primarily as a change of position, role, or status, and an ecological approach, which considered it as a flow of movements in space.

Since the 1950s, analyses of social mobility have focused on the career paths and the intergenerational transmission of occupational categories. This last theme crystallized essential questions relating to the construction of social inequalities, such as social reproduction and the possibilities of ascending or descending the occupational ladder. It mobilized sociology to the point of becoming one of the most dynamic fields of research, which was to become totally autonomous in relation to the work in the city and in the urban setting. In this movement, sociology came to adopt the definition of mobility as a change of status, role, or position, which was the only one retained until the present day.

At the same time, geographical approaches to mobility have been developing since the postwar period (Kaufmann 2014) and are based around the four main forms of spatial mobility present in the societies of the time: daily mobility, travel, residential mobility, and migration. These are the main forms that can be differentiated according to the temporality to which they address (long or short term) and the space in which they take place (internal or external to the catchment area) (see Table 1.1). Each of these four forms is the subject of an abundant piece of literature and develops its own concepts, arenas, and journals. In short, it is constructed as a field of research. This conception clearly refers to spatial and temporal scales. Yet, if we delve into the research, we quickly realize that, although the temporal dimension is integrated, it is often not really questioned in the academic reflections that insist more on the spatial dimension of mobility.

However, the conceptualization of mobility remains common to all four domains: it is a movement between an origin and a destination. Implicitly, this approach combines a definition of mobility as the crossing of space and a definition as change. In fact, it postulates a coupling of these two orders of phenomena.

	Short time frame	Long time frame
Inside of a catchment area	Daily mobility	Residential mobility
Outside of a catchment area	Travel	Migration

Table 1.1. *The four main forms of spatial mobility*

Dividing spatial mobility analysis into four domains has produced significant scientific advances, even if it has not made it possible to deal with all their links, because of the autonomy of the research domains that it has produced. Although approaches to mobility have often emphasized geography, temporal approaches are an important dimension of the analysis of mobility, especially daily (Drevon 2019) and temporary mobility. An examination of the temporalities of mobility cannot be free of the theoretical foundations of the geography of time (Hägerstrand 1970). Indeed, the Lund School and its most illustrious representative, Torsten Hägerstrand, laid the foundations for an approach to mobility and activities that take into account both space and time. This spatiotemporal consideration of human activities allows us to understand their ordering and coordination within a constrained space–time framework (the prism). The geography of time has received renewed interest from researchers over the last 20 years. This approach to human activities and behaviors is the result of a critique of economically inspired models that postulate a supposed rationality of individuals, thus reinforcing the need to rethink the analysis of mobilities, particularly by reinterpreting the sociology of social mobility.

1.3. The need for an integrative approach

The movement of people, goods, capital, and ideas is at the heart of global change and affects all areas of economic, political, and social life. These intrinsically structural changes appear to be the consequences of globalization and, in particular, of the fluidity of the circulation of capital, goods, and people on a scale never seen before. For example, the mobility of the main factors of production has increased considerably. On the side of capital, mobility has gone hand in hand with the development of the financial industry and increased returns. Liberalization, the development of information and communication technologies, and the continuous development of new services by the financial industry have led to an extremely rapid circulation on a global scale. The spatial and temporal organization of cities and territories is now penetrated by considerable differences in speed, ranging from walking to the immediacy of telecommunications, thus articulating particularly contrasting spatial and temporal scales.

In this context, a person's ability to move in space and time has become a central resource for social mobility and more generally for social integration. In doing so, it raises the question of the relationship between social mobility and spatial mobility. This question was extensively addressed in the 1970s and 1980s by numerous studies that showed that international or inter-regional migration was a "social elevator." The research of Bassand et al. (1985) went even further by analyzing the links between central and peripheral locations and upward or downward social mobility.

To account for these transformations, a new integrative approach is strongly needed, one that does not postulate the "Russian doll" type inclusions between the spatial and temporal forms of mobility or of a sequential type, like the four-stage models used to generate daily movements. Indeed, understanding mobility behavior is fundamentally a question of "why do we move?"

We move around to go to work and carry out the tasks of daily life. But we also move around to relax for leisure activities, which are becoming more and more prevalent. We also move around to fit in with lifestyles where frequent long-distance travel is valued. We travel to cohabitate with a partner, and we also travel following a divorce. Shifting from one activity to another also makes us change our role, our emotional state, and even our social status. These forms of mobility unfold on different temporal and spatial scales, from movement in the vicinity to international migration, and from a brief move in the neighborhood to a move to the other side of the world. Understanding mobility thus implies establishing a holistic approach to the phenomenon, which integrates the spatial, temporal, and social dimensions of mobility, thus making it possible to fit together the pieces of the puzzle that the history of research has sometimes misplaced and often scattered around.

In this endeavor, the work of Michel Bassand is essential and pioneering. In the book entitled *Mobilité spatiale*, Bassand and Brulhardt (1980) laid the foundations for such an approach. They consider mobility as a total social phenomenon in the sense of Marcel Mauss and define it as all movements involving an actor's change of state or system under consideration. With this definition, mobility has a dual spatial and social quality, which makes it richer than purely spatial or purely social approaches.

Since the beginning of the 2000s, many thoughts on mobility have been developed under the banner of mobility turn. They aim to develop an integrative definition of the phenomenon in order to provide a real concept. These reflections concern the theoretical understanding of the phenomenon (Cresswell 2006; Urry 2007), the way in which mobilities are experienced (Merriman 2012), the role that mobilities play in the constitution of the contemporary individual (Kellerman 2006), the way in which

they have evolved over time, etc. These works deconstruct spatiotemporal mobility scales and see this phenomenon as fully integrating migration. They insist that crossing geophysical space is generally a means to an end, not the end itself, and that therefore it is essential to look at the nature of this end in order to understand the motivations of mobility. This is how the mobility paradigm was born, which is a way of analyzing societies by paying attention to the role played by the movement in the organization of social relations. Such an approach allows us to legitimize questions concerning the practical, discursive, technological, and organizational devices implemented by societies to manage distance, as well as the methods necessary to study these devices.

The integrative approach to the notion of mobility, which stems from the work of Michel Bassand and the mobility paradigm, makes it possible to consider mobility in a resolutely interdisciplinary multiscale approach. In particular, it has the advantage of making it possible to approach mobility as (1) a socio-spatial phenomenon, (2) an analytical indicator, and (3) a social value. These three modalities of the notion of mobility are specific and complementary:

- *Mobility as a socio-spatial phenomenon.* The first modality is the observation that being mobile refers to a double faculty: that of moving, of changing place, but also that of transforming ourselves, of adapting to a new situation, of changing status, position, skills, etc., these two dimensions being strongly intertwined.

- *Mobility as an analytical indicator.* The second modality is that mobility can be considered as an analytical indicator of social reality. In this sense, measuring mobility can, for example, help us to understand the dynamics of family relationships. It can also, for example, make it possible to measure the rhythmic pressures to which working women with young children are subjected in terms of reconciling family life, social life, and professional life (Kaufmann 2011).

- *Mobility as a social value.* In preceding developments, mobility was understood as a primary good (Gallez 2015), within the meaning of Article 13 of the Universal Declaration of Human Rights relating to freedom of movement. The mobility value is, however, marked by a fundamental ambivalence: when movements are rapid, distant, and frequent, therefore reversible, they have very positive connotations; when, on the other hand, it is a question of migrations, in other words migrations of poor populations, therefore irreversible, they have a negative connotation. In contemporary Western societies, reversible mobility has thus become a dominant social norm, which is constructed particularly on the basis of a fantasy that associates rapid and distant movements with positive experiences of self-enrichment through travel experiences.

1.4. A new research arena

Mobility conceptualized with the help of the three modalities just described opens up the social sciences to new questions and thus renews the debates on social and economic differences, differentiations, and inequalities in relation to time and space. Over the last 15 years, work on mobility has been largely based on a broad, integrative approach to the phenomenon of mobility, considering it as a total social fact in the sense of Marcel Mauss, which allows for interdisciplinary recompositions around several epistemologies likely to produce a renewal of knowledge. More specifically, concerning the spatiotemporal mobility scales, four complementary approaches based in social science are developed, through the hybridization of urban geography, urban sociology, and the analysis of public policies with a spatial impact.

The first approach considers that the generalization of reversible forms of mobility requires an adaptation of the approach of contemporary societies. In his book *Sociology beyond Societies*, Urry (2000) is very clearly situated in this perspective, as is Manuel Castells (1996) in *The Network Society* or Jeremy Rifkin (2000) in *The Age of Access*. In this approach, social categories become blurred, and the traditional metric distances of geography lose their meaning. By looking through the lens of a network-based apprehension of the world, we make all that is related to fixity disappear and thus to the instituted substance of societies and their stratifications (Offner and Pumain 1996; Montulet 1998).

The second approach consists of considering the transformations of mobility as the practical consequence of an ideology of speed characteristic of modernity, to which people are now subjected. In this perspective, the social injunction to mobility is becoming more and more pressing, particularly in the world of work (Vignal 2005). Moving fast, far and often becomes imperative for those who want to prove that they are dynamic, motivated, or ambitious (Amar 2010). This posture is clearly that of Bauman (2013) in *Liquid Modernity* or of Janelle (1969) and Harvey (2001) when they speak of the compression of space–time. The vision of mobility as an ideology is very strongly focused on the world of work: daily commutes between home and work do indeed constitute a significant part of contemporary movement, but because of their rational motivation, they play only a minor role in the construction of a relationship with space between the traveler and the places they pass through; however, mobility also comes under the heading of other fields, such as leisure and tourism, which contribute to shaping a pace of life.

The third approach involves interpreting changes in mobility as one sign among others of the advent of a society of individuals (Drevon 2019). In this view, society as a whole is then based on the idea of freeing human beings from the clutches of community

and traditional attachments to make them more rational and reflexive with regard to their own development (Ascher 1995; Bourdin 2005). The multiple rhythm lifestyles that are developing, as well as the hybrid forms of travel such as long-distance commuting, “digital nomads,” or dual residents, are to be considered as reflections of individual aspirations. The central issue of this individualization becomes a social cohesion: how can so many differences be made to cohabit harmoniously (Tasan-Kok et al. 2013)?

The fourth approach to transformations in mobility is inspired by *Time Geography* (Hägerstrand 1970; Pred 1977) and also finds its extension with the concept of accessibility (Lenntorp 1976; Burns 1979) and of activity programs in time and space (Hensher and Stopher 1979). In this approach, the modalities of the simultaneous consideration of space and time are linked to three types of constraints: the capacity to appropriate a potentially available geographical context, the need for co-presence between individuals (knowing where, when, how, and for how long), and the conditions of availability of the activity opportunities offered (opening hours, teleworking, etc.). From this point of view, the transformation of mobilities is interpreted by a spatiotemporal enlargement of the possibilities to carry out activity programs.

Despite their epistemological differences, these four ways of interpreting the relationship between mobility and society converge on the diagnosis of a growing fragmentation and diversification of the temporalities of mobility (David 2007; Drevon et al. 2020), as well as the enlargement of the potential for speed provided by transport systems and connected objects and their accessibility. These observations support the theory developed by Rosa (2010) concerning the acceleration of life rhythms when he states that this results from the conjunction between technical acceleration and the multiple injunctions linked to social acceleration.

1.5. Articulating spatial and temporal mobility scales

In order to take the description and detailed understanding of the transformations of mobility and societies that have just been outlined in this chapter further, the book brings together a dozen contributions from researchers from different disciplinary backgrounds: sociology, geography, demography, anthropology, and political science.

Each of these contributions attempts to describe the different spatial and temporal mobility scales from a specific angle and according to a common sequence. Thus, each chapter in this book opens with a detailed review of scientific knowledge. From the presentation of the major references in the field, it then proposes a synthesis of different research works carried out in Europe on the subject discussed to finally lead

to the outline of future research perspectives based on the discussion of the current debates and controversies that animate it. This writing device has the advantage of providing a didactic and comprehensive overview of the different spatial and temporal mobility scales as well as the issues related to each of them.

The book follows a path that tends first to put the conceptual and theoretical issues into perspective. Chapter 1, written by Vincent Kaufmann, a professor at the École polytechnique fédérale de Lausanne (EPFL), and Guillaume Drevon, a researcher at the Luxembourg Institute of Socio-economic Research and associate researcher at the LaSUR of the EPFL, proposes a review of the concept of mobility and its current perspectives. In Chapter 2, Christophe Mincke, a visiting professor at the Université Saint-Louis and researcher at the Institut national de criminalistique et de criminologie de Bruxelles, positions mobility as an interdisciplinary notion based on the main theoretical contributions of the last decades, which have tended to link different mobility scales. Chapter 3, written by Caroline Gallez, the director of research at the Laboratoire Ville Mobilité Transport, puts into perspective the eminently political dimension of mobility, particularly the inequalities it generates. Based on an in-depth review of the state of knowledge, Caroline Gallez outlines the principles of mobility as a vector of social justice at both the individual and the city level.

The second part of the book is dedicated to the main forms of mobility, which are also the most studied in social sciences. In Chapter 4, Juliana González, a researcher at the Laboratoire de sociologie urbaine of the EPFL, addresses the issue of inhabiting mobility by proposing an original approach that focuses on the experience of travel time. In Chapter 5, Sébastien Lord and Mathilde Loisele from the École d'urbanisme, d'architecture et de paysage and the Faculty of Planning at the University of Montreal highlight the central dimension of walking and outline the principles of planning that promote its development. Chapter 6, by Samuel Carpentier-Postel, from the Université de Bourgogne Franche-Comté, is dedicated to residential mobility in France and Europe. In this chapter, Samuel Carpentier-Postel puts into perspective the dynamics of residential mobility and their determinants. Chapter 7, provided by Garance Clément, a researcher at the Laboratoire de sociologie urbaine of the EPFL, and Camille Gardesse, from the École d'urbanisme de Paris, discusses migration at different spatial scales from a critical perspective.

Finally, the third part of the book is dedicated to atypical forms of mobility. In Chapter 8, Emmanuel Ravalet, a researcher at the Université de Lausanne, describes the complexity of the different forms of large-scale work-related mobility. Chapter 9, by Pascal Viot, an associate researcher at the Laboratoire de sociologie urbaine of the EPFL, looks at the issue of mobility and urban rhythms related to major events. Laurie

Daffé, a researcher at the Laboratoire de sociologie urbaine of the EPFL, highlights in Chapter 10 the theme of river mobility from an anthropological and ethnographic perspective. Chapter 11, by Arnaud Le Marchand of the Université du Havre, focuses on the different forms of temporary and seasonal mobility. Chapter 12, written by Guillaume Drevon and Vincent Kaufmann, suggests putting the limits of the concept of mobility into perspective. In this last chapter, the authors also suggest renewing the approach to mobility through the prism of the concept of rhythm, thus prefiguring a rhythmology of mobility and more broadly of contemporary societies.

1.6. References

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