

## Chapter 5

# The Mobile Risk Society

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The very modern experience is that of the disappearance of solid structures and their acquainted reliabilities and familiar habits and the erosion of stabilities. Modern living is faced with constant change, motion and transit. There is an ongoing compulsive necessity for individuals to define their social boundaries and affiliations and to navigate their life courses. Modernity is conceived as an unintended process of individualization and disembedding and the ongoing extension of social networks (Simmel 1923; Castells 1996). Modern life reconfigures and restructures permanently the social ties and spatial and material elements in people's environments.

Constantly increasing spatial mobilities are expressions for these fundamental changes within the constitutions of modernity (Urry 2000). But also they are the 'time-space compression' (Harvey) of capitalist societies, the 'death of distance' (Cairncross 1997) and the acceleration of modern life (Virilio 1986). The theory of reflexive modernization and risk society (Beck 1992; Beck, Bonß and Lau 2003) is one of the current attempts to grasp the socio-temporal and socio-spatial changes within modernity. Ulrich Beck asks 'What is globalization' (Beck 2000a). For him it is at first sight the erosion of the national container societies and the rise of new constellations of risk, uncertainty and insecurity. This paper explores different readings of the cosmopolitanization and globalization of modern life. In the light of the theory of reflexive modernization it interprets globalization as the dominance of ambivalence on the global scale. It goes along with the mobilization of the risk society and the rise of what I call the 'mobile risk society'.

In 1986 Ulrich Beck published his book *Risk Society* in Germany (the English version appeared in 1992). It had a lasting impact on social scientific analyses in Germany and other European countries. In the year of the Chernobyl accident it provided the floor for a new critical approach in German sociology. The social and ecological movements were about to change society. Hannah Arendt's ideas of a critical civil society and the mobilizing potentials of the public realm were prominent and alive. In considering the analysis of technological and ecological risks Beck problematized *risk* as a social concept and a general social phenomenon. In a certain way he anticipated what Zygmunt Bauman (2000) recently described as the 'liquidity' of social structures and social practices of integration, embedding and stability. The risk society is a society where social structures become instable and permeable. It is a social formation where the threat of a downward social mobility is omnipresent for all social classes. Precarious stabilities are considered to be in a state of liquefaction. Under the conditions of general insecurity, uncertainty and ambivalence, class struggles return, but without the (relatively) clear-cut dichotomist

structure of the industrial age. Social risks seem to be taken for granted in many capitalist and (neo)liberal states. The social instability and weakness of the nation state system, the 'Keynesian National Welfare State' (Jessop 2002), seem to be accepted and the politics act as if this is inevitable and without alternatives. The ongoing individualization culminates in a structurally institutionalized individualism, where the individual is the legitimate addressee of responsibility. In his theory of the risk society and reflexive modernization Beck puts this at centre stage and combines it with a general theoretical perspective on technological and scientific risks (Beck 1999). In Bauman's reading the risk society is one where its members are urged to 'walk on quicksand' (Bauman 2005, 117). People need to deploy strategies to cope with a new mobility regime that demands mobility and flexibility from everybody. We call this 'mobility management' (see Kesselring and Vogl in this book). It means that people use their competence to manage the increasing demands for social and spatial mobilities. 'In skating over thin ice', Bauman cites the nineteenth-century essayist Ralph Waldo Emerson, 'our safety is our speed' (Bauman 2005, 1). The risk society in a world of global complexity and flows is a 'mobile risk society'. It sets its members into motion without giving any clear-cut reliabilities, any direction and guidance for a successful life without anxiety and fear of failure. The increasing mobilization of the risk society leads into a social situation where the individuals are forced to navigate and decide whilst they are confronted with increasing lack of clarity, with social vagueness and obscurity. It is not a coincidence that for Bauman the freelancer, the self-employed knowledge worker and the 'digital nomads' (Makimoto and Manners 1997) are the paradigmatic social figures and types of the second modernity:

The greatest chances of winning belongs to the people who circulate close to the top of the global power pyramid, to whom space matters little and distance is not a bother; people at home in many places but in no one place in particular. They are light, sprightly and volatile as the increasingly global exterritorial trade and finances that assisted at their birth and sustain their nomadic existence. ... Their wealth comes from a portable asset: 'their knowledge of the laws of the labyrinth.' They 'love to create, play and be on the move'. They live in a society 'of volatile values, carefree about the future, egoistic and hedonistic'. They 'take novelty as good tidings, precariousness as value, instability as imperative, hybridity as richness'. In varying degrees, they master and practice the art of 'liquid life': acceptance of disorientation, immunity to vertigo and adaptation to a state of dizziness, tolerance for an absence of itinerary and direction, and for an indefinite duration of travel (Bauman 2005, 3-4).

Within the mobile risk society people are self-responsible for the roads and trajectories they choose during their life course. They cannot overlook the whole complexity of a life in a reflexive modern society. But nevertheless, modern institutions treat them as if they could do so. They behave as if people would like to decide and to navigate through the misty cliffs and obstacles of social structures, where success and failure are very close and likely. Sennett talks about a non-linear mobility mode that people need to know, if they want to move successfully through the social structures of a flexible capitalism (Sennett 1998).

Against this background we need to ascertain an important difference between Beck's 1986 risk society and the one that authors such as Bauman, Urry, Sennett and others describe it at the time of writing (2006). Deep-going changes within the constitutional settings of modernity occurred over the last twenty years. Today, the risk society is a world risk society; and it is a mobilized society – spatially as well as socially. The time-space structure of the world risk society is based on the functionality, efficiency and the effectivity of large-scale infrastructures of transport and communication. The cosmopolitanization of modern societies, their processes of hybridization and cultural amalgamation are directly related to enormous flows of capitals, people, goods, ideas and signs. The mobility and flexibility of the world risk society is build upon and stabilized by huge and complex global transport systems. More than 90 per cent of all transnationally traded goods travel by vessels (Gerstenberger and Welke 2002). The intercontinental shipping industry is one of the most important industrial complexes in the world. 'For cities and regions a non-stop flight to London is a direct pipeline into the world economy' (Keeling 1995, 119). And the worldwide airline network defines the pace of capitalist exchange and interaction. Its connectivity is the metronome of the 'world city network' (Taylor 2004; Derudder; Witlox 2005; Kesselring 2007):

Travellers from strands in the web linking the world's cities. Corporate emissaries, government trade and commerce representatives and independent entrepreneurs, for example, move among cities, greasing the wheels of production, finance or commerce through face-to-face contact (Smith and Timberlake 1995, 296).

Powerful 'global infrastructures' shape the cultural and the social contexts of modern societies. They lay down the new 'geography of mobility' (Sennett) on a world scale. Airports are crossroads where the spaces of globalization intersect the spaces of territorialization. Based on global systems of transport, mobility and communication the cosmopolitanization of modern societies occurs quasi by the way, underhand and most of the time totally without excitement, without expectation and without wider recognition. Constellations of 'change, risk and mobility' (Boltanski and Chiapello 2003) are omnipresent under the conditions of reflexive modernization. The everyday practice in economy and society is a mobile one (Larsen, Urry and Axhausen 2006; Lassen 2006; European Foundation for the Improvement of Living and Working Conditions 2006).

In a world of global interconnectedness travelling is essential and air travel is fundamental (Larsen, Urry and Axhausen 2006; Kesselring 2007). But the 'dealing with distance' (see Urry in this book) becomes more complex, more differentiated. Social, geographical and virtual spaces slot into each other. The bridging of time and space is no longer exclusively tied to physical movement of people and goods. Complex arrangements and assemblages emerge where people use technologies instead of travelling and face-to-face contact. 'Telepresence' (Mitchell 1995) is not a substitute for physical co-presence. But it enlarges the motilities of actors and opens up new configurations and accesses to networks of cooperation, sharing of knowledge and solidarity (Wellman and Gulia 1999; Vogl 2006).

As a consequence, we can no longer analyse phenomena like these with the traditional categorical toolbox of mobility research. The key question of mobility research is: How do people realize connections and exchange in a global society of networks, scapes and flows? There is an important change in the modern concept and practice of mobility. It is linked to the emergence of a 'network sociality' (Wittel 2001), a 'networked individualism' (Boase et al. 2006; Castells 2001) and the social construction of solidarity and social stability through the technoscapes of the Internet. Social positioning in time and space is getting differentiated. Beyond 'classical' forms of integration, social embedding and identity, which are based on locality, presence and face-to-face interaction (Giddens 1997), 'connectivity' and virtual mobility become integrative moments of social life (Tomlinson 1999; Wellman and Haythornthwaite 2002). Access to information, knowledge, cooperation and solidarity can decisively influence human relations in a form as it is property and possession in localized social contexts. If we consider future mobility research we need to pay attention to structurations beyond class, social status and milieu. Mobility research needs to integrate a network perspective on movement and motility (see the introduction to this book) which does not yet neglect the relevance of classes and milieus but integrates a perspective on the disorganized character of modern economies and societies (Urry 2003; Kaufmann 2002). Social structuration, integration and positioning have to be re-thought in a cosmopolitan perspective as Beck and others demonstrate (Vertovec and Cohen 2002; Beck 2000b). Mobility has to be re-thought in the same way. It needs to be understood in terms of its impacts on the social configurations of societies in the global age (see Beck in this book).

The following four arguments illustrate the structural changes in mobility and its consequences on societies and the social. First, mobility is a general principle of modernity. We cannot imagine a modern life without movement, motility and mobility. They are incremental elements of the 'script' of modern societies and as such they are inevitable and fundamental. They can be found in organizational routines and they are inscribed into the ways of making decisions within political institutions (Jensen 2006).

Second, against conventional concepts, mobility has to be conceived as an inconsistent, contradictory and ambivalent principle of modernity. The slightly differentiated terminology of mobility research proposed in the introduction to this book makes it plausible that new categories for the explanation and description of mobility phenomena are needed.

Third, mobility needs to be conceived along the transition from first to second modernity. Against this background on the global and societal scale a shift can be observed from a directional to a non-directional concept of mobility. In first modernity, movements in spaces were conceived as point-to-point measurable and unambiguous status changes. They were conceptualized as movements to be channelled and controlled. In second modernity, the uncontrollable, non-linear and non-directional character of mobility and migration is obvious. This changes the social strategies of actors to tackle mobility constraints and chances. In other words: the attempts of the first modernity to increase spatial movements to a hitherto unimagined amount leads into the transformation of mobility as a social conception. Modern societies increase mobility to explore new opportunity spaces. But at the

same time the crisis of the modern mobility concept is visible. We may not exclude from thinking the alternative mobility futures of an immobile mobility beyond mass transport. Maybe the linear modernization of mobility leads to a tipping point where virtual mobility becomes a very attractive alternative to the global rushing around and bustle of today?

Fourth, to approach these fundamental questions of mobility research I propose the reflection of three basic perspectives on mobility: the *moving masses perspective* focuses on quantitative effects of the linear modernization of mobility. The *mobile subject perspective* takes the individual seriously as an actor with a subject-tied mobility politics. And the *motile hybrid perspective* reflects the complex relations between actors and structures: it concentrates on the fact that individuals always move through highly pre-structured spaces and environments. It takes seriously that in most cases it is impossible to distinguish between the autonomous moves of individuals and the structural impacts of societal and professional constraints within mobility decisions.

The article concludes with some suggestions for a 'cosmopolitan perspective' in social-science-based mobility research. The global mobilization of the risk society has impacts on many scales – from the body to the global. This is one of the reasons why mobility issues are predestined for transdisciplinary treatment. Mobility is an overarching issue within social sciences. It goes right through nearly all spheres of societies (Sheller and Urry 2006). Hence, new centres in mobility research will emerge, because the *leitbilder* and models of (social, physical and virtual) mobility research come into trouble and motion (see Sheller and Urry 2006; Hannam, Sheller and Urry 2006). The societal organization of mobility as a mono-mobility, tied to one paradigmatic mode of transport, will lose its dominance. The future of mobility will be multi-scalar and multi-functional. The temporal use of mobility technologies becomes more and more important.

Connectivity as a substitute to embedding and long-time affiliation will be organized by the use of new technologies and the dynamic and fluid organization of social and professional networks.

All this leads into a conceptual change in mobility research as a whole and to a transgression of disciplinary boundaries. Under the conditions of reflexive modernization we realize mobility as a 'multi-dimensional concept' (see Canzler and Kesselring 2006; Urry in this book), which cannot be analysed in a national perspective any longer. As a fundament for future research we need multi-dimensional concepts and methods instead and mobility research opens the horizon for a cosmopolitan perspective on modern societies.

### **Mobility as a general principle of modernity**

Mobility is a general *principle* of modernity, comparable to individuality, rationality, equality, and globality (see Bonß, Kesselring and Weiß 2004). Mobility relates to the process of mobilization as the other principles do to individualization, rationalization, the equalization of gender, race and class and the globalization of economies and societies. As with the other principles and processes the mobilization of the world

is as incomplete as it is in the case of global justice and the pursuit of equal rights for men and women, all races and all social classes. But nevertheless, mobility is a powerful principle. It legitimizes political decisions and actions, as we can observe in the case of the European Union and its efforts to realize a 'European Monotopia' (Jensen and Richardson 2003) and a common zero-friction space of seamless mobility (Hajer 1999; Jensen 2006; European Foundation for the Improvement of Living and Working Conditions 2006).

The assertion that mobility is a basic assumption for modern societal structuration has prominent predecessors in sociological traditions (see Rammler in this book). Marx for instance emphasizes the processes of breaking down and speeding up as central elements of capitalist societies. Simmel (1920) elaborates his concept of modernity as a specific configuration of movement and motility, 'constancy and flux' (Simmel 2004, 509).<sup>1</sup> In pre-modern societies mobility is not a positive value and not a principle which has any relevance for actions and individual and collective decision-making (Bonß and Kesselring 2001). The aim of travelling is to return to the place of origin. The notions of stability and constancy, respectively immobility, dominate social situations and contexts. The most important concept for social integration is 'local belonging' and 'social status', which are 'immobile' social categories.

Modern societies have a comprehension of mobility which is not self-evident and which does not simply pop up in empirical data. The positive connotation of mobility and social change would not have been possible without a new assessment of risk, 'unsafety' and uncertainty. Bonß exemplifies this in the history of the social concept of risk (Bonß 1995). Historically it was during the twelfth and thirteenth centuries that the concept of risk came up. The perception of uncertainty as a risk was developed in seafaring and long-distance trade. In these contexts people firstly identified travelling as an instrument for social change and individual progress. Before that, travelling was not a free choice but a duty and a 'must'. Michel de Montaigne reports in his *Journal de voyage en Italie* (1581) of experiencing travel as an exciting social practice. In contrast to his companions spatial movement had an importance of its own for him. It had a value for his individual self-concept and his consciousness. He was one of the first who conceived movement as mobility, describing how mobility changed his individual viewpoint and perception of the countries he was travelling through. But Montaigne was a unique person and character at his time. His fellows could not understand his excitement and fascination.

More than 200 years later Johann Wolfgang von Goethe explicitly formulated the new perspectives indicated by Montaigne. His famous words 'travelling to Rome to become another' from the *Italianische Reise* give expression to the modern social concept of mobility. For Goethe mobility was much more than only spatial movement. He had the concept of using spatial movement as a vehicle and instrument for the transformation of social situations and of realizing projects and plans by travelling. To him travel was a mode of social change and the way for him to access an individual life.

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<sup>1</sup> Simmel talks about *Bewegung* and *Beweglichkeit* (movement and motility) as constitutive elements of modernity. See also Junge (2000: 85ff).

In the modern concept of mobility the imagination of a mouldable society and the idea of human beings as subjects on their way to perfection melt together. They connect with the idea of spatial movement as the dynamic factor, the 'vehicle' or instrument for it. 'You must have been there to understand what's happening': this is the idea behind the 'tourist gaze' (Urry 1990). Against this background it is not a coincidence but an indicator for the relevance of mobility as a general principle that modernization theory deals with mobility as one of the key indicators for social change and the measurement of the modernity levels of societies (Zorn 1977; Zapf 1998).

This can be studied in the European Commission's agenda and namely in the Lisbon Strategy, the current action and development plan for the European Union. Mobility is at the heart of the process to interlink European Countries into a common market and to construct the 'European Monotopia' (Jensen and Richardson 2003) as an interactive space where national boundaries do not play that role that they still do today.

Under the conditions of second modernity the social conception of mobility changes at least in three ways:

- First, the close relation between social and geographical mobility breaks up. Paradoxically, the compulsion to be mobile increases in a time where technology enables people to organize proximity across space and without movements (see European Foundation for the Improvement of Living and Working Conditions 2006; Schneider and Limmer in this book). But the readiness for geographical mobility is not a prerequisite and a guarantee for upward social mobility any longer (see Kesselring and Vogl in this book). This one of the paradoxes of the mobile risk society.
- Second, we observe the rise of virtual mobilities (Castells 2001). Cyberspaces are spaces of sociality and solidarity. They become stable and reliable realms for social interaction (Boase et al. 2006; Boes et al.; Wittel 2001). People realize projects and complex joint undertakings over distances and cultural differences without being corporeally on the move. New forms of transnational social integration and relations arise which are not based on physical contact and co-presence. They rely on communication networks and telepresence and they are new phenomena of global connectivity, sociality, and immediacy (Tomlinson 2003).
- Third, the self-image of the modern mobility-project changes. During the eighteenth and the nineteenth century and during the first half of the twentieth century societies conceived social and geographical mobility as 'not yet realized'. Under the conditions of permanent congestion and increasing insecurity concerning social ascents and descents it becomes visible that the modern mobility of autonomous subjects through time and space is illusionary. This is a kind of disenchantment of the modern mobility imperative and the beginning of a realistic appraisal of mobility as a general principle of modernity. In line with Bruno Latour's notion of modernity it is possible to say 'We have never been mobile' and we will not be able to move totally freely and unrestrictedly (see Latour 1993). In second modernity people and institutions realize mobility as imperfect and incomprehensive, as a goal that is

unattainable in total and a project which cannot be produced in completeness. Mobility is an ambivalent phenomenon. Modern societies need to provide the mobility potentials for a maximum amount of free movement. But at the same time they realize the impossibility and the counterproductive effects of increasing mobilities.

Against the background of these three development paths some paradoxical effects of the reflexive modernization of mobility become visible and theoretically relevant. On the one hand the discourses of mobility tend to be disillusioning. This is obvious, especially in questions of the social and ecological sustainability of transport but also in questions of global justice and transnational social mobility. But nevertheless, on the other hand the essence of mobility as a general principle of modernity remains stable even though the institutional settings for its realization change. In other words, the mobility paradox results from reverse tendencies between the conceptual and the institutional level of modernization. On the level of *principles* there is *continuity* concerning the relevance and the social and political importance of mobility. The zero-friction society and seamless social and spatial mobility remain powerful societal goals and values (Hajer 1999). But on the level of *institutions* and institutional procedures and routines there is irritation, confusion and doubt. This leads to a structural *discontinuity*, where institutions search for alternative solutions for social, ecological, economic and cultural problems caused by increasing mobility. And they realize that the mobility script of modern societies and institutions is impossible to change without risky and dangerous impacts on the whole organization of modern societies (see Rammler in this book). The sometimes nearly euphoric but often naïve celebrations of virtual mobility as a substitute for spatial movements sheds a light on the catastrophic nature and the ambivalent character of modern mobilities. Societies realize the destructive potential of unrestrained physical mobilities. Virtual mobility forces societies and their institutions into the search for alternatives in the organization and the supply of mobility. For a theory of mobility in the context of reflexive modernization the paradox nature of mobility is decisive and a point of departure for theoretical reflections and conceptualizations: on the one hand mobility is the great white hope of modernity, the symbol of Enlightenment and progress. And on the other side it is the ‘thinking avalanche’, the ‘self-reflexive natural disaster’ (Sloterdijk 1989, 26) that threatens the world. Modern society is speeding up and threatens itself with destruction and burial. This is the reason why Sloterdijk reflects modernity in respect to Ernst Jünger’s notion of a ‘total mobilization’ of the social and the natural (Jünger 1931).

### **Mobility, ambivalence and the paradox effects of capitalism**

Modern history reports on the human quest for new horizons and markets (for example, Braudel, Ollard and Reynolds 1992; Koselleck 1977). The opening up of new opportunity spaces was always grounded on the transport of people, goods, ideas and technologies. Be it the travels of Marco Polo in the late thirteenth century, the Portuguese and the Spanish conquest of the South American continent from the



years around 1500 on, or the economic and later colonial exploitation of foreign regions, countries and continents by the capitalist actors of the nineteenth century, all these processes of finding and closing connections, stabilizing contacts and exchange relations were based on innovations in the transport sectors. Not without unconcealed fascination and acknowledgement, Marx and Engels write in the Communist Manifesto:

The need of a constantly expanding market for its products chases the bourgeoisie over the entire surface of the globe. It must nestle everywhere, settle everywhere, establish connections everywhere. The bourgeoisie has, through its exploitation of the world market, given a cosmopolitan character to production and consumption in every country. To the great chagrin of reactionaries, it has drawn from under the feet of industry the national ground on which it stood. All old-established national industries have been destroyed or are daily being destroyed. They are dislodged by new industries, whose introduction becomes a life and death question for all civilized nations, by industries that no longer work up indigenous raw material, but raw material drawn from the remotest zones; industries whose products are consumed, not only at home, but in every quarter of the globe. In place of the old wants, satisfied by the production of the country, we find new wants, requiring for their satisfaction the products of distant lands and climes. In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal inter-dependence of nations. And as in material, so also in intellectual production. The intellectual creations of individual nations become common property. National one-sidedness and narrow-mindedness become more and more impossible, and from the numerous national and local literatures, there arises a world literature (see the German original in Marx and Engels 1980, 16–17).<sup>2</sup>

But at the same time modernization is also a history of oppression, social inequality, domination and control. The mobility of the one is the flexibility and the immobility of the others. If the Spanish conquerors stepped on new land they extended the spaces of influence for their Iberian kingdom. But they brought suppression and diseases to the American natives. If the capitalist entrepreneurs of the nineteenth century explored new markets and economic relations they produced prosperity for themselves and others. But they installed a system of worldwide exploitation and social inequality. If we observe movements within social and geographical spaces we can measure them and we can reproduce them quantitatively in figures, tables and diagrams. But we are never able to simply say if the movements of people and goods are acts of freedom and self-fulfilment or if they are reactions to pressure and social or economic constraints. The mobility discourse is deeply connected with the notion of freedom. But if we simplify mobility to movement and motion we are in danger of losing this connection and of talking about many things but not about mobility. The history of modernity is the history of the constant increase and optimization of mobility systems. From the eighteenth century onwards, modern societies invested enormous sums and intellectual power to optimize transport systems and to reduce the resistance of space against the global flows of people and goods (Sennett 1994).

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2 The translation is taken from the website of The Australian National University (updated 14 November 2006), <<http://www.anu.edu.au/polsci/marx/classics/manifesto.html#Bourgoise>>, accessed 28 February 2007.

But today the seamless global mobilities reveal the double character of mobility: if we fly through the 'code/space' of the global airline network we are under constant surveillance and control (Dodge and Kitchin 2004; Adey 2004). The airport is a highly ambivalent symbol of modernity (Fuller and Harley 2005; Aaltola 2005). It signals connectivity to worldwide cosmopolitan networks and freedom. But after 9/11 it became an object of total surveillance and control. The global air traveller is the least free traveller in the world (Urry 2002). And an airport is a kind of 'camp' for mobile objects and subjects (Diken and Laustsen 2005), where people and things are scanned, sorted and distinguished into clean and unclean, risky or secure and so on.

Mobility refers to the ambivalent and dialectical character of modernity (Bauman 1991). Simmel points out that the nature of modernity is shaped by the dichotomy of movement and motility. In contrast to pre-modern societies modern constellations are characterized by social and geographical mobility. Modern people travel with intrinsic motivations. They are not only urged by the existential needs and necessities or social conventions.

Modern society is a society on the move. Central to the idea of modernity is that of movement, that modern societies have brought about some striking changes in the nature and experience of motion or travel (Lash and Urry 1987, 252).

There is constant flux in modern societies. They are always in transition and on their way into new configurations, temporal stabilities and to a fragile and transformative equilibrium (Elias 1997; Urry 2003). The social concept of mobility is an expression for this basic assumption of modernization theory. It is a societal way of tackling with the ambivalence of modernity. Social, geographical and virtual flows produce instability and insecurity. The problem of sorting and channelling movements of people, goods, artefacts, information, waste and so on becomes evident in the course of Western modernization (Sennett 1994; Thrift 1996; Thrift 2004). Unintended consequences of spatial and social mobilizations become evident, inevitable and non-rejectable. In particular the unintended ecological effects of a modern transport system show the problems of modernity with itself. They are reflexive in this way that the positive effects of increasing mobility potentials cause negative effects for the environment and the living conditions of humans and animals (Whitelegg 1996; Thomas et al. 2003). Sustainable mobility is one of the crucial topics which exemplify the reflexive modernization of mobility and mobility politics. It demonstrates the *Wahlverwandtschaft* or elective affinity (see Rammler in this book) of first modernity and spatial movements as a resource and dynamic factor of progress and welfare. It shows how difficult it is to regulate a deep-going and radical change to a sustainable transport policy (Hesse 1993; Harris, Lewis and Adam 2004). And today we know a lot about the ecological modernization of transport systems. We know how necessary it is. But also we are conscious of the risky character of a consequent change in transport policy. We realize the chances but also the limits of a radical reverse. Alternative concepts like CashCar and choice (see Canzler in this book) accept the stability and the robustness of the system of 'automobilism' and automobilities (Featherstone, Thrift and Urry 2005). They learned about its nature as a given and hard-to-change social fact which can be influenced but not substituted in

total by other modes of transport. Automobility and individualization are entangled and signify the modern mobility script in Western societies.

In Bonß and Kesselring (2004, 20ff) we developed different modes of dealing with the ambivalences of mobility and modernity. How to cope with uncertainty and the risky character of mobility in principle depends on the basic perception of the structural ambiguity of modernity. Modern strategies aim to increase and optimize the amount of movements on different scales of the world society. But the enhancement of the societal motilities lead into a situation where more mobility is not better but worse. Its increase endangers the society as a whole. The mobile risk society is without alternatives to the quest for an appropriate and a sustainable dealing with mobilities. For the development of mobility policies which face the fundamental ambivalences of mobility three basic variants can be distinguished:

- Ambivalences can be seen as *antinomies*, as incongruent and indissoluble 'contradictory certainties' (Schwarz and Thompson 1990). This is the standard reading and interpretation in the context of first modernity. This view of ambivalences legitimizes purification practices which eliminate possible alternatives and foster one-best-way strategies.<sup>3</sup>
- Ambivalences can be seen as *inconsistencies*. Inconsistencies are different from contradictory certainties. They are incompatible at first glance, but may be integrated in the long run.<sup>4</sup>
- Ambivalences can be interpreted as *pluralism*; that is, as equally good possibilities, which are not contradictory but indifferent and perhaps paradoxical. In a certain way this is a post-modern reading of ambivalences. But the difference against a background of reflexive modernization is: the plurality of different strategies – for instance in transport policy – is not a process of fragmentation and disintegration but it signifies the quest for a policy which faces plurality as an integral element and source of power for the future shaping of mobilities in reflexive modern societies.

Each of these variants indicates specific strategies or modes to cope with ambivalence. If we conceive ambivalences as *antinomies* and contradictory certainties, the fitting strategy is to resolve the contradiction; that is, to decide for one of the contradictory certainties and to fight for their realization. In this case the reaction to the problem

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<sup>3</sup> See for example the analysis of alternative variants to the internal combustion engine in the history of the car (see Knie 1994).

<sup>4</sup> Urban strategies in transport policy and the use of technologies for the ecological and the service improvement in public and private urban transport are good examples for this. The so-called MOBINET in Munich demonstrated a post-confrontational strategy in transport policy which tried to integrate the diametrically opposed positions of members of the ecological and green movement and the prevailing car and public transport lobby in Munich. It was a major attempt for an integration of inconsistencies under the roof of urban transport policy (see Hajer and Kesselring 1999; Kesselring 2001; Kesselring et al. 2003). This large-scale project was an historically important attempt to dissolve inconsistencies and to bind them together into a common urban strategy (for other case see Flämig et al. 2001; Bratzel 1999).

of ambiguity is the search for clearness and unambiguity. The means of choice is *purification* and the development of one-best-way strategies. People operate with the supposition that in principle there is only one best solution, not only for technological problems but for social problems as well.

In the second case, the fitting strategy does not aim at purification. If ambivalences are seen as *inconsistencies*, the incompatibilities cannot be abolished by decision and optimal solutions, but at most by time. How this functions can be studied in the educational novels of the eighteenth century and onwards, which present their heroes as inconsistent but developing persons, who may be able to integrate in their biography highly different concepts and identities.

The third version characterizes the highest degree of the acceptance of ambivalence. For the supporter of the *pluralistic* position there exist no one-best-way solutions but a plurality of possible, rational and equivalent strategies to deal with the same problem. These may be indifferent or paradoxical, but they are judged as possible and legitimate paths. In this last perspective ambivalence is a normal phenomenon. That is why there is not necessarily a claim to integrate the different concepts and identities.

### **From directional to non-directional mobility**

The theory of reflexive modernization (Beck, Giddens and Lash 1994; Beck, Bonß and Lau 2003) asks for the processes of social construction that define the paths into alternative futures. That is why the subtitle of the 'risk society' is 'towards a new modernity' (Beck 1992). One of the crucial theoretical ideas is that modernity fundamentally transforms itself from first to second (or reflexive) modernity by permanently applying modern principles as guidelines for societal orientation and the development of routines. But these principles, respectively the institutional routines based on them, are incomplete, incomprehensive and imperfect in their impacts. Social change in the light of reflexive modernization theory does not result from rational planning and directional optimization. Reflexive modernization is conceived as a process of unexpected, unseen, unintended but thus inevitable transformations of the general conditions of modernity. It is provoked by the unintended consequences of powerful modern principles such as rationality, individuality, globality and mobility in practice. Consequently the theory of reflexive modernization focuses on processes of hidden or subversive (that is, subpolitical) transformations of modern institutions and practices (see Beck, Hajer and Kesselring 1999; Bösch, Kratzer and May 2006). In this view the transformation of modernity and mobility is non-directional. The interpretation of reflexive modernization breaks with sociological traditions such as those of Weber and Durkheim. Those anticipate the linear progress of modern capitalism and its institutional and normative settings. In contrast to theorists of linearity like Ritzer (Ritzer 1996), theorists of reflexivity identify a second or 'another' modernity and a 'different rationality' (Lash 1999).

The idea of a reflexive rationality is basically linked with the acceptance of ambivalence and the loss of power of simple political regulation strategies. Beck discusses this on the global scale and he deploys different scenarios. He thinks

through the consequences of politics that accepts the weakness of the nation state and the prevalence of neoliberal economic and political strategies, which intentionally neglect the state as an actor (Beck 2006).

The concept of a first modernity is inextricably connected with the notion of nation state and national identity. First modernity is conceptualized as a container modernity. The reference point of theories of (first) modernity is the nation state's institutional and affirmative formation. This perspective is criticized as inadequate to the ambivalences of globalization (Beck 1997; Albrow 1996; Held et al. 1999; Grande 2001). Beck puts it as 'methodological nationalism' and argues for a 'cosmopolitan sociology' adequate for phenomena like networks, scapes and flows beyond the nation state and its structurations. A new terminology with notions like (socio)spheres (Albrow 1996), scapes (Appadurai 2001; Urry 2000), transnational social spaces (Pries 2001), connectivity and immediacy (Tomlinson 1999), interconnectedness (Held et al. 1999), liquidity (Bauman 2000), fluids (Mol and Law 1994) and *mobilities* (Sheller and Urry 2006; Hannam, Sheller and Urry 2006) indicates another perception of society and its structures as mobile, transitory, transformative and liquid. All these approaches of theorizing in terms of mobility (Albertsen and Diken 2001) suppose the social as new configurations and relations of stability and change, mobility and immobility. Even theorists of linearity and stability use these terms to talk about stable elements in a world of flows. Ritzer and Murphy (2002) use metaphors such as blockages, hurdles, strainers and barricades to emphasize the power and the necessity for stabilities and fixities in the steering and the regulation of powerful liquidities and flows. As a consequence, Beck maintains that theorizing has to skip boundaries and to focus on structurations beyond the nation state and beyond modern stabilities. In line with Urry (2000), Beck's work is a quest for the ambivalent and fluid structurations of 'societies beyond society' and for the mechanisms and the technologies of restructuring in a world of risk, disembedding and social liquidity: '[R]eflexive modernists see globalization as a repatterning of fluidities and mobilities on the one hand and stoppages and fixities on the other, rather than an all-encompassing world of fluidity and mobility' (Beck in this book).

Beck's theory of cosmopolitanism is a theory of ambivalent or rather fluid structuration. Ahmed et al. use a dialectical metaphor for this interest in mobile structuration. Mobility and migration are conceived as social processes of ongoing 'uprootings and regroundings' (Ahmed et al. 2003). Individuals, groups and whole societies are seen in a constantly fluid process of socially constructing stabilities and affiliations. Hannam, Sheller and Urry coined the term 'mooring' for the social fact that mobilities do not exist without relation to immobilities (Hannam et al. 2006). People need social benchmarks and stability cores to organize a life in motion.<sup>5</sup> And modernity itself rests on the ontological dialectics of 'fixities and motion' (Harvey, cited in Brenner 1998). Beck uses the metaphor 'roots with wings' (2002, 408) to express the temporality and the transitory character of moorings and affiliations.

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5 See Kesselring 2006 and Kesselring and Vogl in this book on the so-called 'centred mobility management', and the strategies to construct stabilities in a life of intense mobility constraints and needs.

The mobility pioneers of the second modernity (Kesselring 2006) have the ability to construct membership and affiliation for a certain time and to change contexts. They reconfigure social networks if necessary and needed. An individual life in Beck's understanding is a liquid life where people try to navigate and to influence the direction of their mobilities. But at the same time they accept the imperfection and the heteronomy of influences that cause movements in an unintended and unexpected direction. In the centre of the theory of reflexive modernization are questions of social integration and cohesion. How can cosmopolitan societies secure a relative stability for their members? How is identity possible under the conditions of increasing mobility, liquidity and disembedding? Or as Beck puts it: 'Who am I? What am I? Where am I? Why am I where I am? – very different questions from the national questions: Who are we? and What do we stand for?' (Beck in this book).

Thinking through mobility with the toolbox of the theory of reflexive modernization leads to the notion of a *non-directional mobility*. In the following I will elaborate this and I propose a systematic approach for the distinction between modern and reflexive, respectively first and second modern mobility.

The modern notion of society is connected with the idea of social security, technological safety and the calculation of risks (Beck 1992; Bonß 1995). Modern thinking and modern social concepts concentrate on stability. Modern theorists assume that after fundamental changes and transformations systems tend to restructure into stability. 'All that is solid melts into air' means that, after the downgrading and the destruction of traditional structures, the new just and stable order waits for its fulfilment. The 'will to order' goes right through the classical modern social theories like Parson's functionalism and Foucault's political theory. The 'reduction of complexity' is seen as a general principle of modernity. 'Heavy modernity' (Bauman 2000) or 'hard capitalism' (Thrift 1997) aim to reduce the fluidity of social structures. In line with Bauman it is possible to say that (first) modernity intends the purification of all its elements and Ritzer and Murphy (Ritzer 1996) re-formulate the Weberian idea of modernization as standardization and conformation.

At the beginning of the twenty-first century we cannot describe modernity with the tools of a sociology of order and stability any longer (Urry 2003). Second modernity goes along with liquidity and ongoing transformations on every scale of political and social regulation (Brenner 2004). It is more oriented to contingency than to order. Second modernity is characterized by the unavoidable presence and dominance of ambivalence and the need to a 'reflexive rationality' (Lash 1999). It implies the social and the political acceptance of permanent change, unpredictability, contingency, disorder and the continuous restructuring of accepted realities (Junge 2000). Catchwords like 'networks, scapes and flows' (Urry 2000; Beck, Bonß and Lau 2003), transnational connectivity, interdependency and the dominance of unintended side effects (mad cow disease, GM food, traffic congestion and so on) indicate that second modernity is an era of instability, insecurity and uncertainty. Liquid modernity refers to a social situation of continuous 'boundary management' (Beck, Bonß and Lau 2003). Under the conditions of reflexive modernization and global complexity the idea of linear modernization becomes obsolete and loses its touch of practicability and its explanative power. The notion of the 'meta-play of power' (Beck 2006) links to the diagnosis that social theory cannot identify any

longer powerful actors who transform societies (for example, the economy as the key actor in Marxist theories or the dialectics of culture and economy in Simmel's works). And on the other hand the term 'meta-change' indicates that actors are faced with the problem of identifying their own direction in a world of opaque flows.

The distinction between first and second modernity is heuristic, not essentialist. As it is in the case of Bauman's 'heavy' and 'light' modernity (Bauman 2000) the purpose of those ideal types is to identify different reference points for social structuration in modern societies. In the beginning of modernity (approximately in the eighteenth century) there were other dominant patterns to cope with uncertainty, and ambivalence than at the beginning of the twenty-first century. Table 5.1 shows the different reference points and patterns of structuration and their relationship in the general social change from industrial to risk society (or second modernity) and indicates the rise of mobilities as structuring social dimensions. The two patterns are typical of the two modernities on the micro, meso and macro scales.

**Table 5.1 Dominant reference points of social structurations in first and second modernity**

<b>First modernity</b>	<b>Second modernity</b>
Critique of ambivalence → <i>purification</i>	<i>Acceptance</i> of ambivalence → <i>pluralism</i>
One-best-way solutions <i>structures, rules and firmness</i> <i>safety/certainty</i>	<i>Multiple-best-way solutions</i> <i>networks, scapes and flows</i> <i>riskiness/uncertainty</i>
Constancy (scientification and) <i>predictability</i> <i>growing stability</i> <i>continuity and evolution</i> target-oriented (national) <i>order</i> stable <i>connections</i> (national) structures in the long run Solid boundaries and <i>boundary-keeping</i>	<i>Fluidity</i> (scientification and) <i>unpredictability</i> <i>growing liquidity</i> <i>discontinuity and change</i> process-oriented (cosmopolitan) <i>contingency</i> <i>connectivity</i> as problem and project temporary (transnational) structuration Flexible boundaries and <i>boundary management</i>

Source: Revised from Bonß and Kesselring (2004).

In detail there may be a lot of serious questions on the systematic and the historical reliability and meaning of the different concepts of modernity. The distinction relates fundamentally to one of the major questions in historical sciences: Are there any periods in history possible to distinguish in a clear-cut and obvious way? But the point is that this distinction is even not essentialist. Beck and others use the notions of first and second modernity as a heuristic tool to exemplify the fundamental social change in modernity. Other authors such as Bauman, Thrift, Castells and Urry use slightly different terminologies. But the common idea, the central threat, is that

a global complexity and interconnectedness is rising that fundamentally changes the conditions of the social, the cultural and the political. The consequence is a comprehensive loss of reliability, predictability and stability in all social spheres of society and on all political and cultural scales of regulation and interaction.

Mobility or, even better, *mobilities* move this deep-going change into centre stage. Hence the second modernity is a mobile risk society, 'in which the conditions under which its members act change faster than it takes the ways of acting to consolidate into habits and routines' (Bauman 2005, 1).

The mobile risk society questions – for its individual members as well as its institutions and systems of regulation – how social stability is possible in a world of constant movement and change.

This is the key argument and main hypothesis of this article: *along with the emergence of second modernity there are structural changes in mobility, too.* And more than this: the rise of mobilities on every scale of society – from the body to the global – radicalizes the risk society and shows the global interconnectedness and the inescapable character of the social and spatial mobilization of modernity.

But how is it possible to characterize these structural changes? In an article with Wolfgang Bonß (see Bonß and Kesselring 2004, 17) we used an example for this. In the 1970s and 1980s motorways had an origin, a direction and a destination. It was the motorway from Nuremberg to Munich, from Geneva to San Remo or from Paris to Lyon. Today it is the E9 and the E7 or it is the rhizomatic structure of relations around conurbations like the Cologne area or the Ruhrgebiet. Nobody talks about origin and destination, not in the radio and TV stations, at all. In the past each motorway had its unique history, its 'identity'. It was something special to drive from A to B. Today the orientation is abstract. Motorways are places or scapes of flows, not of identification. People using the motorways participate in the Trans European Network (TEN) which spreads all over Europe and which makes the old A7 into an 'episode', a small 'bridge', on the way from (for example) The Hague to Rome. People move in a scape, a material structure where they do not understand its constitution and all the relationships and conditions shaping it. The scape represents a mobility potential for different individual, collective and societal purposes. It seems to be material but it is a constitutive element of the optional space around us which offers the chances to move and to act (motility). But we realize this system of motorways as just one element in a global network of relationships, with many crossroads and intermodal transfer points to other modes of transport and so on.

This illustrates the general hypothesis: mobility as a social concept (and not as its reduction to spatial movement, traffic and travel) transforms itself from *directionality* to *non-directionality*. People experience 'an absence of itinerary and direction' (Bauman 2005, 4) in modern life. They use narrations of the 'indefinite duration of travel'. In other words: the social concept of first modern mobility is *directional*; it emphasizes the necessity and the possibility to develop effective straightness and accuracy – in a spatial as well as in a social way. Modern mobility in this sense is conceived as movement with *origin*, *direction* and *destination*. From first to second modern mobility it is the change from roads to routes. The paradigmatic metaphor is the lightning career as a 'meteoric rise' from the bottom to the top. In the concept of first modernity mobility means to travel on roads and tracks, with calculable



durations and precise timetables. It means to move straight forward and socially upwards. The paradigmatic example for a modern form of *spatial* movement since the nineteenth century was the *train*, which was not only fast, but at the same time was able to move from one place to another in a direct line and in a calculable manner. In contrast to pre-modern societies the modern idea of *social* mobility was moulded to the concept of *class* mobility and *vertical career* mobility.

The reflexive concept of mobility is *non-directional*. It goes along with the experience of straightness as a fiction and the likelihood of the failure of directionality. The everyday experience of traffic jams and the daily breakdown of the 'dream of traffic flow' (Schmucki 2001) makes it plausible. In the dimension of social mobility on the other hand there is the experience of unexpected blockades and the changing of clear-cut criteria of inequality to mere differences. Be it long-distance travelling, be it career mobility, or be it surfing the Internet, the experience of moving from one spot to another is often non-directional and corresponds much more with drifting and floating than with a movement with clear direction and itinerary. Actors are faced with disappointing situations of delay, waiting, and breakdown. Experiencing reflexive mobility is full of detours and misty, incomprehensible tracks. The acceptance of ambivalence we can also describe on the body scale of individual decision-making (see Kesselring and Vogl in this book). As Bauman puts it, one of the major characteristics of reflexive modernization for individuals is the 'acceptance of disorientation' (Bauman 2005, 4).

In first modernity the dominant conceptualization of mobility refers to the paradigmatic idea of unambiguous transport in the geographical dimension and to the idea of clear vertical class, respectively, career mobility. In both dimensions mobility meant moving from one place to another in a more or less direct route. The concept of reflexive mobility is differently constructed: it no longer refers to the paradigmatic idea of linear development, but to concepts of reticular and network mobility. This switch seems necessary, because there are many ways without a clear-cut and unambiguous direction for the move, neither under geographical nor under social perspectives. Besides the *road mobility* of first modernity the *network mobility* emerges. The dominant imagery of a *vertical career mobility* gets out of focus, and is replaced by a concept and practice of *horizontal scene mobility*, which calls a permanent and active boundary management (Wittel 2001; Vogl 2006). Table 5.2 summarizes different aspects of the concepts of directional and non-directional mobility.

### **Moving masses, mobile subjects, and motile hybrids**

In the following section I elaborate three basic perceptions in current mobilities research. In most of the studies on mobility they play – explicitly or implicitly – an important role. They interlink disciplines and approaches as different as geography; sociology; cultural, migration and transport studies; science and technology studies (STS); and so forth. In the first concept of mobility research the interest is to measure movements and to describe the scales of movements of people, goods and capitals. In the context of globalization studies the so-called 'moving masses perspectives' is crucial. It is powerful as it helps to depict a precise imagination of global dimensions and dynamics (see, for example, United Nations/Economic Commission for Europe 2005;

**Table 5.2 Directional and non-directional mobility**

<b>First modernity: directional mobility</b>	<b>Second modernity: non-directional mobility</b>
Unequivocal origin, clear direction and distinct destination	Muddled origin, ambivalent direction and indistinct destination
Certainty, orientation, predictability, planning	Uncertainty, disorientation, unpredictability, shaping
Teleology	Liquidity and chaos
Business traveller	Flâneur, drifter
Affiliation, integration	Temporary moorings, 'roots with wings'
<i>Road-mobility</i> : moving from one place to another in a direct line and/or with timetable	<i>Network-mobility</i> : rhizomatic moving in a net without direct lines and/or timetables
<i>Vertical mobility</i> : clear-cut social ascents/descents according to dominant economic criteria	<i>Horizontal mobility</i> : no clear criteria for social ascents or descents; unclearness and 'new confusion'
Class mobility and career mobility	Cultural mobility and biographical mobility

Source: Revised from Bonß and Kesselring (2004).

International Organization for Migration, United Nations 2005). Mobility research needs to measure the quantitative dimensions of global movements, otherwise we cannot say if the phenomena we talk about are relevant. The fundamental hypothesis in mobility research is that there is an increase of movements on the global scale (Urry 2003). Hence we need more and better data on the quantitative dimensions of mobilities to estimate if there is an increase or a decrease of multiple mobilities.

But also we need to measure the impacts of movements and mobility constraints on individuals, families, groups, social networks and so on. This is the reason why the 'mobile subject', the individual as a mobile actor, who needs to deploy strategies and tactics to struggle and to juggle with mobility constraints, is a very important level and research perspective. The 'body scale' must not be neglected in relation to the quantitative dimensions of mobility.

The third major framing of mobility I call the 'motile hybrid' perspective. In a certain way this is the most important and realistic scale of observation. Motile hybrids are for example the whole fleets of employees of multinational companies travelling around the world without leaving the 'scape' of the company. These 'corporate emissaries, government trade and commerce representatives and independent entrepreneurs' (Smith and Timberlake 1995, 296), these key account managers, mechatronics, or the troubleshooters of the IT industry travelling around the world to solve problems, sell goods or just to meet cannot exist and cannot work without their technological equipments. They move within highly technological surroundings and spaces – sociomaterial networks and assemblages. They constantly cross and intersect digitalized 'movement spaces' (Thrift 2004) and they even fly through the 'code/space' (Dodge and Kitchin 2004) of airports and airline networks. Motile hybrids are constellations of bodies, technologies, architectural formations, knowledge and skills. They are actor networks, where computers, mobile phones, Internet connections, the whole cable and

**Table 5.3 Modern ambiguity and concepts of mobility**

<b>Concepts</b>	<b>I</b>	<b>II</b>	<b>III</b>
<b>Characteristics</b>	<b>First-modernity standard</b>	<b>First/second-modernity standard</b>	<b>Second-modernity standard</b>
Interpretation of structural ambivalence as ...	Antinomy	Inconsistency	Pluralism
Reaction to the problem of ambiguity	Searching for clearness and unambiguity by purification	Acceptance and integration of inconsistencies	Ambivalence as normality
Type of solutions	Optimal solutions	Suboptimal solutions	Indifferent or paradox solutions
Principles and characteristics of societal structuration	Class Property Heteronomy	Milieu Possession Autonomy	Network Access Relationality
Structural trends and challenges	Stability	Liquidity	Boundary management, politics of perspectives
Preferred concept of mobility	Mono-mobility	Multi-mobility	Temporalized use of mobility technologies
Models of mobility research	Moving masses	Mobile subjects	Motile hybrids
'Leitbild'/paradigmatic example	Train	Car	Air travel, Internet
Scientific aggregation	'User classes'	'User profiles'	'Fragmented abilities'

Source: Modified from Bonß and Kesselring (2004).

wireless surroundings of the network society and so on, melt together with humans. They interpenetrate with their actions and decisions and it is very hard to say if their movements are intrinsically motivated or just reaction to pressures and demands from outside. But all in all, the highly complex nature of the sociomaterial constellations within the movement spaces of the second modern societies enable individual and collective actors to 'deal with distance' (Urry in this book). The actors never lose contact with their home bases and vice versa. Complex assemblages and 'armatures' (Jensen 2006) of capitals, technologies, knowledge, social skills and the individual capacities of people to handle travelling and technologies enable and empower individuals to travel through networks and to manage a high level of movement and mobility. But at the same time the melting together of individuals and the technological ecologies of the network society guarantees a high mobility level for companies, transnational organizations and cosmopolitan networks and societies.

Table 5.3 presents the different concepts of dealing with modern ambivalences and mobilities. The links to different forms of mobility research are highlighted and should be understood as complementary – not as competing concepts.

The ongoing transformation of mobility research hinges intrinsically on a rising interdisciplinary and international (that is, global) approach in mobility research (Sheller and Urry 2006; Hannam, Sheller and Urry 2006). The ongoing combination of different perspectives on mobility transforms mobility research on many scales and leads into a nearly paradigmatic push in all spheres of social science dealing with global and intercultural phenomena (Sheller and Urry 2006). Mobility as mono-mobility seems to lose its dominance and the multiplexity of 'multi-mobilities' and the temporal use of mobility technologies are getting more and more important (see Larsen, Urry and Axhausen 2006). This leads to a conceptual change in mobility research as a whole and to a transgression of disciplinary boundaries as well as to a new methodology (see Urry 2000 on 'mobile methods').

Beck (2006) describes a similar change of paradigms with his concept of a 'methodological cosmopolitanism'. His diagnosis rests on the observation that traditional sociological concepts lose their explanatory power for the analysis of second modern societies. Notions such as citizen, here and there, absence and presence, space, places and locality, social integration, culture and society have to be rethought against the background of the ongoing mobilization of modern societies. If people are no longer socially integrated in the ways as we knew in the industrial and the nation state age, but they are well connected, they are perfectly socially networked and they develop a intelligent mode of social positioning – not integration – we need to ask if these people are in a state of anomy or if we can learn fundamental things about new modes of *vergesellschaftung* and *vergemeinschaftung*. Simmel's ideas of social networks and circles pointed in the direction of a new mode of sociability. But today, under the conditions of reflexive modernization and networked individualism we are able to conduct research on the mobile positioning of individuals in a society shaped by movements and highly complex mobility potentials.

In line with Beck the institutional and material transformation of nation state societies can be observed. Shifting boundaries (*Entgrenzung*) and new transnational constellations emerge and demand new modes of individual and collective decision-making. Subversively, subpolitically and unnoticed, from science and politics stucturations beyond classical concepts and beyond effective boundaries emerge. The concentration on the territory and its supposed power for social and national integration for societies and cultures seem to be obsolete or at least in question. New categories and concepts are needed for an appropriate description of 'what happens' in the mobile risk society. Mobility theory has the conceptual power and the potential to constructively reflect and modify the 'zombie categories' (Beck) of the modern society and sociology. Beck underpins Urry's proposal for 'networks, scapes and flows' as the adequate terminological triangle for an analysis of mobilities beyond the nation state. Beck refuses the prevailing structure paradigm of Western sociology, with its fixations on nation states as reference points for social analysis and theory. Against this background taken-for-granted boundaries and concepts from the structure paradigm (like national and international, citizen and foreigner, member and non-member, property and non-property and so on) come into trouble. The question arises if these concepts still refer to a certain practice of more or less cosmopolitan human beings. Under conditions of reflexive modernization and in

the context of a mobilized risk society they lose their former explanatory power and have to be replaced by a new terminology of mobility, fluidity and connectivity.

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