ON THE
MOVE

MOBILITY IN THE MODERN WESTERN WORLD

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The Production of Mobilities:
An Interpretive Framework

Moving your hand, walking, dancing, exercising, driving to work, moving home, going on holiday, marching, running away, immigrating, traveling, exploring, attending conferences. All of these are forms of mobility but they rarely enter each other's orbit in social and cultural enquiry. The slippery and intangible nature of mobility makes it an elusive object of study. Yet study it we must for mobility is central to what it is to be human. It is a fundamental geographical facet of existence and, as such, provides a rich terrain from which narratives—and, indeed, ideologies—can be, and have been, constructed. From the first kicks of a newborn baby to the travels of international business people, mobility is everywhere. Mobility, it seems, is also ubiquitous in the pages of academia. It plays a central role in discussions of the body and society.[1] It courses through contemporary theorizations of the city.[2] Culture, we are told, no longer sits in places, but is hybrid, dynamic—more about routes than roots.[3] The social is no longer seen as bound by "societies," but as caught up in a complex array of twenty-first century mobilities.[4] Philosophy and social theory look to the end of sedentarism and the rise of foundationless nomadism.[5] Finally, but perhaps most importantly, mobility bears a number of meanings that circulate widely in the modern Western world. Mobility as progress, as freedom, as

opportunity, and as modernity, sit side by side with mobility as shiftlessness, as deviance, and as resistance. Mobility, then, is more central to both the world and our understanding of it than ever before. And yet mobility itself, and what it means, remains unspecified. It is a kind of blank space that stands as an alternative to place, boundedness, foundations, and stability. This space needs examining, and that is the purpose of this book. With this in mind, it explores the geographical imaginations that lie behind mobilization in a diverse array of contexts. It investigates the ways in which mobilities have been given meaning within contexts of social and cultural power. How, in other words, mobility has emerged as an object of knowledge in a range of practices from physiology to international law, dance notation to architecture, and simultaneously, how imaginations of mobility have informed judgments about people and their practices over the last several centuries in the Western world. In order to provide an interpretive framework for these explorations it is first necessary to start, as it were, at the beginning.

Movement and Mobility

Let us begin with a basic signifier of mobility—getting from point A to point B.

A--------------------------->B

Mobility involves a displacement—the act of moving between locations. These locations may be towns or cities, or they may be points a few centimeters apart. This is the simplest understanding of mobility as it appears on maps of movements. In classic migration theory, for instance, the choice of whether or not to move would be the result of so-called *push* and *pull* factors in A and B, respectively. The content of the line between them would remain unexplored. The cumulative effects of these movements are also what remain taken for granted in more recent social theory where movement is coded as *travel, nomadism, routes,* or *lines of flight.* This line is a good starting point for such an exploration. I want to explore the content of the line that links A to B, to unpack it, to make sure it is not taken for granted.

The movements of people (and things) all over the world and at all scales are, after all, full of meaning. They are also products and producers of power. I want to make an analytical distinction here between movement and mobility. For the purposes of my argument, let us say that *movement* can be thought of as abstracted mobility (mobility abstracted from contexts of power). Movement, therefore, describes the idea of an act of displacement that allows people to move between locations (usually given

as point A and point B in abstract and positivist discussions of migration). Movement is the general fact of displacement before the type, strategies, and social implications of that movement are considered.

We can think of movement, then, as the dynamic equivalent of location in abstract space—contentless, apparently natural, and devoid of meaning, history, and ideology. The critiques of abstract space and location are well known.[6] Movement, as the dynamic equivalent of location, has not been given the same attention. If movement is the dynamic equivalent of location, then mobility is the dynamic equivalent of *place.* Place is a word we use in all manner of contexts in theoretical expositions and in everyday life. Within geographical theory and philosophy it has come to signify meaningful segments of space—locations imbued with meaning and power.[7] A place is a center of meaning—we become attached to it, we fight over it and exclude people from it—we experience it. The same cannot be said of location. Why geographers have not subjected mobility to the same scrutiny as the more allegedly fixed and bounded categories of space, time, territory, and landscape is curious. I have frequently heard commentators at conferences talk of the rise of mobility in the modern world as the "end of geography." I presume they do not mean the discipline, but even so, such a statement is thought provoking. What is not "geographical" (both in real world and disciplinary terms) about things and people on the move? Why is geography equated with fixity and stasis? Mobility is just as spatial—as geographical—and just as central to the human experience of the world, as place.

In this book, mobility as socially produced motion is understood through three relational moments. First, when talking of human mobility, we are talking about mobility as a brute fact—something that is potentially observable, a thing in the world, an empirical reality. This is the mobility measured and analyzed by modelers, migration theorists, and transport planners. It is the mobility captured by high-powered computer hardware and software in sports science labs or animation studios. It is the motion tracked by closed circuit television and biometric systems in airports and elsewhere. Here mobility comes closest to pure motion and is at its most abstract. Second, there are ideas about mobility that are conveyed through a diverse array of representational strategies ranging from film to law, medicine to photography, literature to philosophy. These representations of mobility capture and make sense of it through the production of meanings that are frequently ideological. Mobility means this. Mobility means that. Thus the brute fact of getting from A to B becomes synonymous with freedom, with transgression, with creativity, with life itself. Third, mobility is practiced, it is experienced, it is embodied. Mobility is a way of being in the world. The way we walk, for instance, says much about us. We may be in love, we may be happy, we may be burdened and sad. We inhabit

mobility differently according to our mood. Human mobility is an irreducibly embodied experience. Our feet may hurt as we walk, the wind might blow in our face, we may not be able to sleep as we fly from New York to London. Often how we experience mobility and the ways we move are intimately connected to meanings given to mobility through representation. Similarly, representations of mobility are based on ways in which mobility is practiced and embodied. As David Delaney has written, "human mobility implicates *both* physical bodies moving through material landscapes *and* categorical figures moving through representational spaces."[8] Mobile people are never simply *people*—they are dancers and pedestrians, drivers and athletes, refugees and citizens, tourists or businesspeople, men and women. This book is about the interface between mobile physical bodies on the one hand, and the represented mobilities on the other. To understand mobility without recourse to representation on the one hand or the material corporeality on the other is, I would argue, to miss the point.

Movement, Time, and Space

Movement is made up of time and space. It is the spatialization of time and temporalization of space. Any consideration of movement (and mobility) that does not take time *and* space into account is missing an important facet. Time and space, as Kant reminded us, are the fundamental axes around which life revolves—the most basic forms of classification. Certainly any material object has to have coordinates in time and space. Movement, as the displacement of an object from A to B, involves a passage of time and, simultaneously, a traversal of space. Time and space, however, cannot be simply taken for granted in the consideration of movement. Time and space are both the context for movement (the environment of possibility for movement to occur) and a product of movement. Moving people and objects are agents in the production of time and space. Perhaps the most well-known formulation of this is *time–space compression*—the effective shrinking of the globe by ever-increasing mobility at speed enabled by innovations in transportation and communications technology. Thus Marx was able to write of the annihilation of space by time. The success of railroad technology in the nineteenth century and the new modes of mobility that it enabled meant that things were, for all practical purposes, a lot closer.[9] While the abstract idea of movement is composed of equally abstract notions of absolute time and space, the notion of mobility I want to propose here, as a thoroughly social facet of life imbued with meaning and power, is composed of elements of social time and social space.

The question of the social production of space and time has received sustained attention in the social sciences and humanities in recent years.[10]

While space has been produced through the division of the world into functional spaces (the processes of mapping and geometry, the classification of space as property, and the delineations of planners), time has become regulated and standardized as clock time, as the time of the timetable and the daily schedule. Both time and space, it has been argued, have been taken out of the world of nature and immediate experience and placed, instead, in the world of abstraction—abstraction ruled, for the most part, by the demands of trade and capital, but also by various forms of patriarchy, colonialism, and imperialism.[11]

Clearly this process of the social production of abstract time and space has implications for the understanding of movement and mobility. Mobility, as a social product, does not exist in an abstract world of absolute time and space, but is a meaningful world of social space and social time. Mobility is also part of the process of the social production of time and space. Consider the story of the railroad as an example. Wolfgang Schivelbusch has described how the invention of the railroad and its rapid spread across the surface of the globe forced a fundamental rethinking of space. Distances were practically shrunk as it became possible to travel farther in a shorter time. The metropolis was conversely allowed to expand into the new suburbs as it became possible to travel farther between work and home. Indeed work and home became functionally separate spaces because of the new modes of mobility. As more and more people traveled at new speeds in trains, a new panoramic perception of space (as seen from the train window) emerged. For the first time it was possible to see the world as a continuous blur. Even the earliest English trains at a mere 20 to 30 miles per hour were three times faster than a coach. The effect was noted at the time in the *Quarterly Review*:

> For instance, supposing that railroads . . . were to be suddenly established all over England, the whole population would, speaking metaphorically, at once advance en masse, and place their chairs nearer to the fireside of their metropolis by two thirds of the time which now separates them from it; they would also sit nearer to one another by two-thirds of the time which now respectively alienated them. If the rate were to be repeated; our harbours, our dockyards, our towns, the whole of our rural population, would again not only draw nearer to each other by two-thirds, but all would proportionally approach the national hearth. As distances were thus annihilated, the surface of our country would, as it were, shrivel in size until it became not much bigger than one immense city.[12]

Finally the new modes of mobility enabled by the railroad reduced the distinctiveness of places—their *auras*. Without effective mobility over

long distances at high speed, places served as local and unique markets selling their own products, which were tied to seasonal production. Transportation changed these products into commodities, as goods began to lose their spatial presence and became instead products of an increasingly expansive market.[13] At the same time it became possible to visit these places as tourists—another factor, some have argued, in the erosion of local distinctiveness.

The railroad also deprived localities of their own time. In 1870 a traveler from Washington, D.C. to San Francisco would have passed through over two hundred *time zones*. Every town had their own time, tied more or less to the position of the sun in the sky. This system worked until the building of the transcontinental railroad (1869); the increased speed of the railroad made this dangerous as it became possible for two trains to be in the same time and space with potentially fatal consequences. On November 18, 1883, the railroad enforced four uniform time zones in the United States. In 1884 this was expanded to the globe with the designation of Greenwich as the prime meridian and the division of the world into twenty-four time zones. Time, thanks to the railroad, was increasingly rationalized, mechanized, and timetabled as people accustomed themselves to tickets, labels, luggage, clocks, timetables, and uniforms. As Ralph Harrington has put it, "The passengers were as much a component of the great railway machine as the tracks and trains, and just as all the movements of the mechanical components had to be controlled if the machine was to operate effectively, so the behaviour of the human traveller had to be regulated with mechanical efficiency."[14] Clearly, then, mobility is not just a function of time and space, but an agent in their production. While the movement of the train (from Paris to Lyon, say) occurs in abstract, absolute space and time, it plays a central role in the production of social time and space. Here, movement becomes mobility.

Ideology, Scale, and Mobility

Mobility seems a chaotic thing—chaotic in the sense that moving things are often chaotic in the way we experience them. Stationary, sedentary life, on the other hand, is hard to see as chaos. Some might say that little of interest can be said about what links the movement of blood in the body and movement of jet planes around the globe. The fact of movement, skeptics might suggest, is both obvious and uninteresting. What connects mobility at the scale of the body to mobility at other scales is *meaning*. Stories about mobility, stories that are frequently ideological, connect blood cells to street patterns, reproduction to space travel. Movement is rarely just movement; it carries with it the burden of meaning and it is this meaning

that jumps scales. It is this issue of meaning that remains absent from accounts of mobility in general, and because it remains absent, important connections are not made. Writing on mobility remains either very specific (about commuter patterns, migrations, or dance for instance) or maddeningly abstract—the kind of work that talks of points A and B. Connections need to be made between the determinedly different approaches applied to the different facets of human mobility listed above. I am inspired here by Daniel Miller, who in an entirely different context, wrote that it was his belief that, "in the present the social sciences would benefit considerably from any theory that managed to clarify connections between features of our world that too often seem like isolated fragments whose simultaneous existence is no more than fortuitous."[15] As Miller points out, this is a dangerously unfashionable enterprise in the post-poststructural world we move in, but one that nonetheless needs to be attempted if we are to avoid simply telling stories to each other with no relevance beyond their own confines. My aim, then, is to provide a way of thinking that traces some of the processes that run through the different accounts of human mobility at different scales, and ties them into a single logic without negating the very important differences between them.

Some examples might help. Consider the flow of blood through the body and the circulation of traffic in the city. Richard Sennett has described the revolution in images of the body that came with the publication of William Harvey's *De motu cordis* in 1628.[16] It was in this text that Harvey announced his discovery that the heart pumps blood through the arteries around the body—blood which is then returned to the heart by the veins. He had discovered the body's circulation system. In so doing he prompted others to see the body in similar ways. Thus, Thomas Willis began to suggest the presence of the nervous system. "The mechanical movement in the body, nervous movements as well as the movements of blood, created a more secular understanding of the body in contesting the ancient notion that the soul (the *anima*) is the source of life's energy."[17] Now it was not the soul that energized life in the body, but the blood. Blood was, for Harvey, "life itself." Clearly, Harvey's discovery had momentous implications for the study of the body and for the history of human medicine, but its implications were much wider than that. Ideas about mobility in the sphere of the body were quickly translated into areas such as economics and city planning.

Health came to be associated with *circulation*. Just as the blood circulated through the body, so air circulated through the city. City managers and planners in the eighteenth century began to clean dirt off the streets and instigated the construction of intricate sewer systems. Road surfaces, previously constructed from pebbles, were made smooth through the use

of flagstones.[18] Urban planners and architects sought to maximize flow and movement. Words such as *artery* and *vein* began to appear in the texts of the new urbanists. They believed that blockages created bad health in the urban body. As Alain Corbin has put it, "Harvey's discovery and his model of the circulation of the blood created the requirement that air, water, and [waste] products also be kept in a state of movement."[19] Thus the meaning of blood circulating through the human body became the guiding metaphor for L'Enfant's plan for Washington, DC.

Textbook descriptions of the reproductive system are remarkable for the way they give meaning to bodily processes in ways the status of *textbook* would normally deny. Emily Martin has shown how the process of menstruation has, for many years, been described in terms of failure using words such as degenerate, decline, lack, and deteriorate. She compares this to the language used to describe male reproductive physiology in a popular textbook: "The mechanisms which guide the *remarkable* cellular transformation from spermatid to mature sperm remain uncertain. . . . Perhaps the most *amazing* characteristic of spermatogenesis is its *sheer magnitude*: the normal human male may manufacture several hundred million sperm per day."[20] This kind of language of achievement is extended into what was, until recently, the dominant way of thinking about human fertilization—the act of a mobile sperm cell penetrating an immobile egg. The mobility of the sperm cell was equated with agency. Martin reports the way physiology texts described the way the egg "drifts" and "is transported," while the sperm "deliver" their genes to the egg after a journey of considerable "velocity" propelled by "strong" tails. Ejaculation "propels the semen into the deepest recesses of the vagina" where the sperm are aided by "energy" so that with a "whiplashlike movement and strong lurches" they finally "burrow through the egg coat," and "penetrate" it. The egg, in other words, is passive and the sperm is active. The sperm does things and the egg has things done to it.[21] It is only recently that the language has changed and the active role of the egg in selecting a sperm has been acknowledged. Or, as Gerald and Helen Schatten, wrote in 1983,

> The classic account, current for centuries, has emphasised the sperm's performance and relegated to the egg the supporting rôle of sleeping beauty. The egg is central to this drama to be sure, but it is as passive a character as the Brothers Grimm's Princess. Now, it is becoming clear that the egg is not merely a large yoke-filled sphere into which the sperm burrows to endow new life. Rather, recent research suggests the almost heretical view that sperm and egg are mutually active partners.[22]

So here, in the body, the sperm's mobility is coded as masculine and active, while the egg is passive, relatively immobile, and feminine.

Such ideological codings of mobility in the body are not bound by the body's walls. These meanings, like those Harvey attached to blood, travel and jump scales. In a remarkable instance of the geopolitics of mobility, the American space agency, NASA, found itself in conflict with its Soviet counterpart as the superpowers attempted to plan a historic linkup in space in 1975 between an Apollo and Soyuz spacecraft. The linkup was seen as an important part of the process of détente during the cold war. The conflict was over the design of the docking mechanism to be used in the linkup. Orthodox docking systems used a male part and a female part. The male part was seen to be active and would penetrate the female part, which was considered passive. The male part would move and the female part would remain motionless. The metaphorical implications of this arrangement became all too apparent during the planning of the Soyuz-Apollo mission and, to put it simply, neither party wished to be penetrated. To overcome this problem, the superpowers designed a whole new androgynous docking system, which featured interlocking *capture latches* where both sides could be active or passive. Although this language is not being taken directly from human physiology textbooks, it is clear that a similar process to that which linked Harvey's blood circulation to the urban environment took place. Meanings given to mobility inside the human body—meanings with highly gendered connotations—are being translated into the politics of the space race. Mobility, here at least, means masculinity.

What these two stories show is that the bare fact of movement—the observation that things like blood and sperm, city traffic, and spacecraft move—is rarely just about getting from A to B. The line that connects them, despite its apparent immateriality, is both meaningful and laden with power.

Historical Senses of Mobility

Mobilities need to be understood in relation to each other. As the dance scholar Norman Bryson has suggested, individual forms of mobility, such as dance, might best be understood in an expanded field of the study of structured mobilities. His call is to open up dance scholarship and consider it as one instance of socially structured human movement, where movement is made meaningful within the conventions and institutions that authorize meaning. He charts, for example, the transformation from premodern to modern forms of dance movement through the idea of abstraction and mechanization. He argues that modern dance in Paris must be understood as but one example of a complex interplay of spectacle, spectatorship, and sexuality that "figured forth, in intense and specialised form, the essential social relation of observer and observed."[23] But to thoroughly comprehend

this transformation between emergent and residual senses of movement, he argues, social kinetics requires that we see a form of movement such as dance as symptomatic of wider changes in the sense of movement. The rise of abstraction and mechanization in a dance such as the Can-Can for instance, must be seen alongside changes in the work place such as Taylorism, the arrival of mass production and new forms of mechanical transport. To understand the Can-Can, then, we must "refer to other domains of movement than dance, to other social regions where movement is analysed and represented and to larger social processes that turn on the redesigning and stylization of action and gesture."[24] He proposes a new field of social kinetics. *Social kinetics* is the history of socially structured movement; it points toward the political and theoretical necessity of seeing mobility as operating within fields of power and meaning, and the crucially larger contexts of changing senses of movement.

In his essay, Bryson points toward one key transformation in the sense of movement, or as I would prefer to call it, sense of mobility. This transformation is one that can be seen to mark the advent of high modernity—a moment when mobility became increasingly regulated and regular—marked by timetables and mechanization. But this is clearly not the only transformation of senses of mobility—of socially structured movement. It is not the ambition of this book to provide a delineated and detailed account of the whole history of mobilities in the West. It is possible, however, to sketch an outline of the transformations in senses of mobility that have preceded the worlds of mobility in the modern West, which form the subject matter of this book.

The Feudal Sense of Mobility

Mobility in European feudal society was a luxury item. The vast majority of people stayed pretty much where they were. To people who lacked transportation facilities and were, for the most part, tied to the land, movement beyond the local was feared and forbidden. In medieval Europe, people and things had their place in the great chain of being and this place was both literal and figurative. Feudal society was intensely territorial. Kings, as figures close to God, granted land to their vassels and demanded obedience in return. These new landholders could, in turn, collect tribute from those who worked on their land. The peasants, the great mass of people, were completely dependent on their lord. Just as lords existed in relations of dependency to the king, so the peasants were permanently in the debt to the lord. He was tied to both the lord and the land.[25] A laborer was referred to as *adscriptus gelbae*—attached to the soil. The right to move, such as it was, was in the hands of private entities. Masters controlled the movements

of their servants, lords the mobility of their serfs, and slaveholders the travels of their slaves.[26] Zygmunt Bauman argues that the premodern world was one of security in relatively small groups of stable people. "Villagers and town dwellers alike knew most of the others they were ever likely to meet, because they had ample opportunity to watch them—to watch continuously, in all their functions and on most diverse occasions. Theirs were communities perpetuated and reproduced by mutual watching."[27] Premodern, European life, in other words, was, for Bauman, the kind of miniature version of a modern utopia where all is seen. This version of society, however, had a necessarily small scope, as "the limits of the gaze defined the size of the world in which secure life could be produced and maintained."[28] To be mobile was to exist on the margins. Wandering minstrels, troubadours, crusaders, pilgrims, and some peripatetic monks existed, for periods of time, outside of the obligations of place and roots. So-called *wandering Jews* lived outside the web of obligations and duties that marked feudalism. For this reason they were looked down upon and distrusted. As Lewis Mumford put it:

> The unattached individual during the Middle Ages was one condemned either to excommunication or to exile: close to death. To exist one had to belong to an association—a household, manor, monastery or guild. There was no security except through group protection and no freedom that did not recognize the constant obligation of a corporate life. One lived and died in the identifiable style of one's class and one's corporation.[29]

For all but a very small minority, to be mobile in the Middle Ages was to be without place, both socially and geographically. Minstrels, for instance, were thought of as lecherous and irresponsible fly-by-nights.[30] Minstrels had no obvious place in medieval life. They were neither peasants nor nobility, and they were frequently wandering through the countryside looking for employment. As people without place, their status was tenuous at best. They would dress in a way that suggested a much higher status, thanks to the generosity of the lords who employed them, and as entertainers they were free to transgress social hierarchies in ways few could get away with. Minstrels also used their footloose life to act as spies in the courts of their employer's enemies. They were frequently made scapegoats for crimes that had gone unpunished.

Jewish people were also subject to the fear and loathing of settled folk. Many Jews wandered around medieval Europe, not through choice but as a result of persecution and expulsion. Ironically, the fact that they were then made mobile led to them being distrusted across Europe for their

mobility. Alongside this mobility was their involvement in commerce and the newly emergent merchant city, both of which were also objects of suspicion by the landed classes.

Of course mobility at a number of scales occurred in feudal Europe. The mobility involved in working on the land must have been relentless. It was the scale of mobility that was restricted. It was not possible to simply travel between towns, much less between nations. There were exceptions to this. Pilgrimages, warfare, and communication necessitated movement over larger distances. The *Canterbury Tales* was, after all, a tale of the road. Much has been made of the "roguish vagabonds" who took to the road at the end of the medieval period following the emancipation of the serfs across Europe. Bauman has described them as the "advanced troops or guerrilla units of post-traditional chaos."[31] In Spain these vagabonds were called *picaro*, which gave rise to the form of literature known as the *picaresque*. A classic of the period was Mateo Aleman's *Guzman de Alfrache* (1599) in which a group of beggars work out various ingenious ways to cheat the ruling elite. Luther's *Liver Vagatorum* (1529) describes twenty-eight varieties of vagabond.[32] It was these vagabonds who created the need for a new societal-level state ordering system. The vagabond was scary because of his apparent freedom to move and escape the status of *adscriptus glebae*, as well as the mutual gaze that ensured premodern order. This new movement was seen as unpredictable.[33]

The Early Modern Sense of Mobility

By the sixteenth century, Europe was experiencing hitherto unheard of levels of mobility by the newly landless and all those associated with trade. The city was the one place where an increased level of mobility was acceptable. The rise of mercantile capitalism necessitated the mobility associated with trade. This commercial mobility gradually loosened the rootedness of feudal society as guilds emerged to protect commercial interests. For the first time there were associations made between freedom, mobility, and city life. "The city air makes men free" the saying went, and hand in hand with this freedom went mobility. A "new freedom of movement" Mumford wrote, "that sprang up with corporate liberties claimed by the medieval town itself."[34] Alongside this, by the late sixteenth century, English feudal order was being rapidly undone as the population grew and agriculture became more efficient, needing less bodily labor and creating new kinds of relationships to the land. Many people became disconnected from the kind of order that held life together for centuries. People were homeless and economically marginal. They were without place. These new "masterless men" were considered extremely threatening because they did not appear to be

part of any recognizable form of order. Their mobility made them illegible. These were the new vagabonds—"people too listless and too numerous to be tamed and domesticated by the customary method of familiarization or incorporation."[35] Whereas medieval society had operated on the basis that every member of a community was responsible for every other (a system known as *frankpledge*) these new mobile strangers made such a system inoperable.

New types of mobility called for new forms of social surveillance and control. All manner of means were devised to achieve this. Vagabonds were branded like sheep to make them visible. Workhouses and prisons sprang up to deal with the casualties of the new vagrancy laws developed in England and France and later exported to the American colonies.[36] Gradually the disciplining role of the gaze became less mutual and more focused in the hands of the state. The control over mobility was nationalized and taken out of private hands. Whereas the only relevant scale for most people in medieval Europe was extremely local, the rise of the modern state gradually took power out of the hands of the local and created the *nation-state*. Central to this process was *poor relief*. Poor relief was the process whereby the local poor were seen to be the responsibility of the local community. In this way the mobility of the poor was managed. As European nation-states became established alongside correspondingly larger markets for goods and wage labor, landowners and local lords found their power to control mobility diminished. As labor became mobile on a national scale, so poor relief became a national issue. The scale of mobility changed for good. People could now move over a much greater range without obtaining anyone's permission. As Torpey has noted, "What we now think of as 'internal' movement—a meaningless and anachronistic notion before the development of modern states and the state system—has come to mean movement within national or 'nation-states.' Historical evidence indicates clearly that, well into the nineteenth century, people routinely regarded as 'foreign' those from the next province every bit as much as those who came from other 'countries.'"[37]

But mobility is not just about the literal movement of people; ideas about mobility in general, and what it might mean, were also changing. Science and philosophy increasingly looked to mobility as a central fact of existence that needed to be accounted for. The historical circumstances of the early seventeenth century and the success of mercantile capitalism saw transformations in the way the concept of mobility was valued. Galileo's new science had reconfigured understandings of movement. Most importantly, the idea of inertia stated that bodies would continue to move in a straight line unless deflected by an outside source. This view of moving bodies contradicted the hegemonic Aristotelian belief that things only moved in order

to reach some end point—some telos. Movement to Aristotle was a result of potential already in an object that had to be fulfilled. The natural state of things was rest. To Galileo, the natural state of things was movement with rest being a mere accident.[38] As Galileo reconfigured mobility in the physical world, so William Harvey gave it new meaning in the body. In the early seventeenth century most medical experts believed that food was converted into blood in the liver, and that this blood then acted as a fuel that was used by the body. Through extensive dissection, Harvey knew this to be false. He was interested in the way blood flowed through the human body. In 1628 Harvey published *An Anatomical Study of the Movement of the Heart and of the Blood in Animals,* which explained how blood was pumped from the heart throughout the body, then returned to the heart and recirculated.[39] The discoveries of Galileo and Harvey had impacts well beyond the realms of science. They informed the political philosophy of Thomas Hobbes.

Crucially, Thomas Hobbes borrowed from Galileo's new science to place relentless movement at the heart of a philosophy of human life that equated movement with liberty. Here was a liberal conception of human mobility—as an individual form of freedom. To Hobbes, individuals were like machines that performed a kind of Brownian movement continually moving and bouncing off of each other in the pursuit of their appetites. Hobbes was also informed by the work of William Harvey. "Now vital movement is the movement of the blood," he wrote, "perpetually circulating (as hath been shown from many infallible signs and marks by Doctor Harvey the first observer of it) in the veins and arteries."[40] Life itself, Hobbes believed, was located in the movement of blood and the movement of the limbs. So whereas Aristotle had imagined a world of clearly directed and finite movements, Hobbes thought of social life as a "homogeneous swarm of incoherent, aimless perpetuations of momentum that had no capacity for growth, for fulfilment, or for rest."[41] The new world, the world of Hobbes, Galileo, and Harvey, was an infinite, restless entanglement of persistent movement. And yet in this new society, happiness itself was based on the freedom to move. Liberty was fundamentally, and for the first time, seen as unimpeded movement. In the *Leviathan* he wrote that "Liberty signifieth (properly) the absence of Opposition; (by Opposition, I mean externall Impediments of movement)."[42]

> For whatsoever is so tyed, or environed, as it cannot move, but within a certain space, which space is determined by the opposition of some externall body, we say it hath not Liberty to go further. And so all living creatures, whilest they are imprisoned, or restrained with walls, or chains; and of the water whilest it is kept

> in by banks, or vessels, that otherwise would spread it selfe into a larger space, we use to say, they are not at Liberty, to move in such manner as without those externall impediments they would.[43]

The view of mobility and liberty in Hobbes is replicated two hundred years later by William Blackstone, who argued that law is derived from a heady mixture of God and physics. The most important principles of matter, he argued, are the "laws of movement, to which all moveable bodies must conform."[44] Mobility, he argued, was an absolute right of man. The right to personal liberty he defined as the power of "loco-movement" or the ability of "changing situation, or removing one's person to whatsoever place one's own inclination may direct; without imprisonment or restraint, unless by due course of law."[45]

The idea of mobility as liberty and freedom would have made little sense in feudal society. In the early modern period, as cities grew and people were displaced from the land, the practice and ideology of mobility was transformed. New mobile figures began to inhabit the landscapes of Europe. Mobility as a right accompanied the rise of the figure of the modern *citizen* who was granted the right to move at will within the bounds of the nation-state. Meanwhile, the popularity of the *grand tour,* an extended voyage around the sites of Europe taken by well-to-do young men, signaled the advent of another modern mobile figure—the *tourist.*[46] To Dean MacCannell the tourist was and is the epitome of modernity. The tourist world, he argues, depends upon the paraphernalia of modern life, on the fact of displacement as a widespread experience, and on the increasing interest in the past as distinctly premodern and marginal—a place to visit. Both citizens and tourists depend on excluded others for their identities. Citizens, allowed to move freely, depend on the noncitizens, the aliens who are not free to move in the same way. Tourists depend on the relative immobility of those who service the new leisure class—those who are stuck in the picturesque European south as well as those (mostly women in the early years) who were left at home.[47]

Western Modernity and Mobility

> The modern individual is, above all else, a mobile human being.[48]

The explorations of mobility in this book are, for the most part, explorations of mobility in the last two hundred years in the Western world. Mobility seems self-evidently central to Western modernity. Indeed the word *modern* seems to evoke images of technological mobility—the car, the plane, the spaceship. It also signifies a world of increased movement of people on a global scale. Perhaps most importantly, though, it suggests

a way of thinking in terms of mobility—a metaphysics of mobility that is distinct from what came before it.

In Britain, improvements in the road network had led to dramatic reductions in travel time by the early nineteenth century. Although still dependent on horse and coach for travel, improvements in the condition and number of roads meant that although it had taken forty-eight hours to get from London to Bristol in 1750, by 1821 it was possible to reach most of England and Wales in the same amount of time.[49] The advent of the railway with the Liverpool to Manchester line occurred in 1830. By 1860 the majority of the current rail network (and, indeed, many lines that have since been closed) was in existence. By 1910 all but the north of Scotland was within ten hours travel time of London. But it was not just speed that allowed space to be annihilated. Rail travel also included more people in the experience of travel. In 1835 around ten million individual coach journeys were made. Just ten years later, thirty million rail journeys were made. By 1870 the number had reached a staggering 336 million journeys. A similar story could be told in the United States. In 1850 the continental United States had 9,000 miles of track. By 1869 the figure had grown to 70,000. It was in 1869 that the transcontinental railroad was completed allowing relatively easy travel from coast to coast for goods and people. The railroad quickly became a symbol of national identity in the United States.[50]

Modernity is certainly a contested concept, and most commentators recognize that it has ambiguities and tensions within it.[51] As Miles Ogborn writes, "Its periodisation, geographies, characteristics and promise all remain elusive."[52] Arguments about the nature of modernity revolve around notions of newness, artificiality, order, reason, democracy, technology, and chaos. All of these are bound up in a general idea that something happened at some point in the past when life before that point could be called premodern. Few terms in contemporary social theory signify so much and so many terms that are apparently in opposition to each other.

The tension that is central in much of this book is the tension between a spatialized ordering principle seen by many to be central to modernity, and a sense of fluidity and mobility emphasized by others. Following Foucault, many commentators have focused on the rise of surveillance and discipline in modernity.[53] The modern world, they argue, is one in which new constructions of space and time have functionalized and rationalized everyday life. Thus Henri Lefebvre notes how modern time has been abstracted and rationalized. Before modernity, he argues, time was etched into life like markings in a tree. With the coming of modernity, however, time becomes separated from life and nature and is instead a property of measurements—an abstraction.[54] James Scott's critique of *high modernity* emphasizes the spatial ordering of society. His argument is that high

modernity has been characterized by a particular way of seeing, which sought to impose order on the chaos of life. The straight lines of trees in modern forestry and the grand plans of Brasilia and New Delhi are all examples of this. At the heart of the project of modernity for Scott is a process of legibility, making the chaotic and localized world of the premodern intelligible by imposing order on it—by replacing the "view from somewhere" and the kind of practical knowledge he calls *metis* with the "view from nowhere," which comes with rationality and science.[55]

Intriguingly, Scott notes in his introduction how the issue of legibility arose from another research direction entirely. He set out to "understand why the state has always seemed to be the enemy of "people who move around."[56] As examples he cites the experience of nomads and pastoralists, gypsies, homeless people, and runaway slaves. The imposition of legibility through space, in other words, was in some way related to the lack of fixity of important marginalized groups in modern society. This sense of anxiety about mobility in modernity is far more extensive than these state reactions to the perpetually peripatetic. There is a more pervasive sense in which mobility has been a source of anxiety in modernity. Think, for example of the social theory of Georg Simmel. In the "The Metropolis and Mental Life," Simmel famously argued that modern, urban life was providing sensory overload. Traditional, rural life, he argued, had been slow and habitual, and the onset of modern urbanity, and especially the development of a money economy and clock time, meant that people were bombarded with sensations that led to an increasingly abstracted sense of self and society. Life became a matter of intellect and the "blasé attitude." This accelerated modernity was a source of both anxiety and important new freedoms as citizens became increasingly cosmopolitan.[57] This sense of anxiety prompted by modernity was also evident outside of classical sociology. In *American Nervousness*, a book popular at the end of the nineteenth century in the United States, George Beard describes the causes of a specific disease he called *neurasthenia*. Beard describes how "modern civilization" is marked by five elements "steam power, the periodical press, the telegraph, the sciences, and the mental activity of women."[58] As with Simmel, Beard looked to modern conceptions of time and the increased velocity of life to show how the capacities of the nervous system were being stretched to the breaking point.

> The perfection of clocks and the invention of watches have something to do with modern nervousness, since they compel us to be on time, and excite the habit of looking to see the exact moment, so as not to be late for trains or appointments. Before the general use of these instruments of precision in time, there was a wider

margin for all appointments, a longer period was required and prepared for, especially in travelling—coaches of the olden period were not expected to start like steamers or trains, on the instant—men judged of the time by probabilities, by looking at the sun, and needed not, as a rule, to be nervous about the loss of a moment, and had incomparably fewer experiences wherein a delay of a few moments might destroy the hopes of a lifetime.[59]

Early American sociologists at the Chicago School of Sociology also placed mobility at the center of their understanding of the world. Robert Park had studied with Simmel in Heidelberg. He inherited many of his ideas about the mobile nature of urban life. Mobility was used by Park's student, Nels Anderson, to differentiate the city from the country. The city, Anderson wrote, "is more mobile, mobility being a characteristic of its life just as stability is characteristic of rural life." Anderson goes on to compare "Main Street" (the country) to "Broadway" (the city), arguing that Main Street is marked by repetition and natural rhythms while Broadway is "cultural, being man-made, and mechanised; and being mechanised, the urban environment has a mobility of its own quite distinct from the movement of people."[60]

While commentators such as Scott have portrayed modernity as an enemy of certain kinds of mobility, others have shown how mobility has been central to the constitution of the modern. Perhaps most famously Marshall Berman adopted Marx's warning about capitalist modernity—"all that is solid melts into air"—to provide a vivid portrait of a modernity where everything was in a state of flux. "Modern environments and experiences," he writes, "cut across all boundaries of geography and ethnicity, of class and nationality, of religion and ideology: in this sense, modernity can be said to unite all mankind. But it is a paradoxical unity, a unity of disunity: it pours us all into a maelstrom of perpetual disintegration and renewal, of struggle and contradiction, of ambiguity and anguish. To be modern is to be part of a universe in which, as Marx said, 'all that is solid melts into air.' "[61] Berman's modernity is one where nothing is fixed or secure. It is chaotic and forever on the move. It is certainly a long way from Scott's rational ordering of the world through modern rationality. It is not the enemy of mobility but its friend.

This general sense of modernity as the age of mobility can be read through accounts of specific forms of mobility. We have already seen how the train journey has become metonymic for a specific kind of modernity. The more everyday experience of walking has been coded in a similar way. Walter Benjamin's account of modernity in Paris includes a multitude of references to both trains and pedestrians.[62] The *flâneur*—a figure free to stroll freely

along Paris' new boulevards—has become a central figure in discussions of modernity and mobility.[63] The migrant has been given the additional burden of signifying a modern condition. John Berger's remarkable trio of novels about encroaching modernity in rural France, feature the rural-urban migrant as the central figure of modern displacement.[64] Exiled and migrant artists and writers are central to the canon of modernity. Think of Picasso. Think of Joyce.[65] Tourists, vagrants, and pilgrims have been used, metaphorically, by Zygmunt Bauman to provide a diagnosis of modernity. Indeed Bauman is one of the most forceful commentators on the incessant mobility of the modern.

> Modernity is what it is—an obsessive march forwards—not because it always wants more, but because it never gets enough; not because it grows more ambitious and adventurous, but because its adventures are bitter and its ambitions frustrated. The march must go on because any place of arrival is but a temporary station. No place is privileged, no place is better than another, as from no place the horizon is nearer than from any other.[66]

Arjun Appadurai's *Modernity at Large* also places migration right at the heart of the modern. He argues that the rupture between the premodern and the modern is founded on linked developments in media and migration. Together, he argues, they produce a new form of imagination that becomes a "constitutive feature of modern subjectivity."[67] Electronic media, he argues, have transformed preexisting worlds of communication and face-to-face conduct. Migration, when juxtaposed with the new electronic media, produces a "new order of instability in the production of modern subjectivities."[68]

> As Turkish guest workers in Germany watch Turkish films in their German flats, as Koreans in Philadelphia watch the 1988 Olympics in Seoul through satellite feeds from Korea, and as Pakistani cabdrivers in Chicago listen to cassettes of sermons recorded in mosques in Pakistan or Iran, we see moving images meeting deterritorialized viewers. These create diasporic public spheres, phenomena that confound theories that depend on the continued salience of the nation-state as the key arbiter of important social changes.[69]

Peter Taylor identifies something of this ambiguity within the analysis of modernity. The modernity of order exemplified by Scott is contrasted with the modernity of chaos exemplified by Berman. "One way in which the ambiguity of modernity operates can now be understood," writes Taylor, "Modern people and institutions devise projects which aspire to order their

world but without fully appreciating that the modern world is the antithesis of order. Modernity, therefore, is a perpetual battle between makers of order and the incessant change which is the condition of modernity."[70]

It is clear, then, that mobility is central to what it is to be modern. A modern citizen is, among other things, a mobile citizen. At the same time it is equally clear that mobility has been the object of fear and suspicion, a human practice that threatens to undo many of the achievements of modern rationality and ordering. Again the development of the railway provides an illustrative case in point. Just as the railway was instrumental in ordering modern life through the production of abstract time and abstract space, so it was the source of new anxieties. As the railway historian Ralph Harrington put it, "Railways could be seen as a symbol of progress, promising economic and social betterment, democracy, energy, freedom from old restrictions, all the benefits and opportunities of the constantly circulating liberty of modern, mechanized civilization. Yet they were also associated with pollution, destruction, disaster and danger, threatening the destabilization and corruption of the social order, the vulgarization of culture, the despoliation of rural beauty, the violence, destruction and terror of the accident."[71]

One place to look for meaning in mobility is the dictionary. Indeed, the definitions given to terms like movement and mobility in the *Oxford English Dictionary* suggest something of the complexity of thinking about these terms. The word *mobility* was introduced into the English language in the seventeenth century when it was applied to persons, their bodies, limbs, and organs. It referred to a capacity to move and was used interchangeably with *movement* in natural science. In addition to these embodied and natural science uses, mobility was also used in a social sense. By the eighteenth century, the moveable and excitable crowd was known as the mobility (the *mobile vulgus,* in contrast to the nobility), later shortened to the *mob.* Meanwhile, the word movement was going through its own transformations. On the whole it was used from the seventeenth century to refer to the process and mechanics of movement, especially in terms of machines. Even older than this, however, is the idea of the movements as shitting—as "the runs." There are both embodied and abstract histories to both terms. On the whole, however, movement appears to refer to an abstract and scientific conception, while mobility is thoroughly socialized and often threatening. Both terms emerged with modernity.

We do not have to confine ourselves to dictionary definitions to see the fractured ways in which mobility has been understood. More generally, modernity has been marked by time-space compression and staggering developments in communication and transportation. At the same time, it has seen the rise of moral panics ranging from the refugee to the global

terrorist. The celebrated technologies of mobility simultaneously open up the possibility of an increasingly transgressive world marked by people out of place at all scales. This is the tension that runs through the chapters in this book. Mobility is both center and margin—the lifeblood of modernity and the virus that threatens to hasten its downfall.

This brief account of changing historical senses of mobility is supposed to be indicative. I cannot hope to provide a comprehensive accounting for all the different mobilities that have occurred in the world. Clearly much has been missed. What this sketch does reveal, however, is the way ideas about, and practices of, mobility have been historically variable. The movement of people has been central to the construction of worldviews in wildly different ways. It is to this process of the production of mobilities that I now return.

Mobility—A Critical Geosophy

This book is about how the fact of movement becomes mobility. How, in other words, movement is made meaningful, and how the resulting ideologies of mobility become implicated in the production of mobile practices. It is an exercise in critical geosophy. *Geosophy* is a term coined by J. K. Wright in 1947 to describe the geography of knowledge. Geographers, he argued, would benefit from studying the *terrae incognitae*—the unknown territories—of the modern world. These unknown territories, he argued, were no longer literal, material places. The whole world, or nearly all of it, had been charted and mapped. The *terrae incognitae* he wrote of were the worlds known and unknown by people in everyday life. The geographical knowledge of sailors, farmers, or dockworkers.[72] By *critical* geosophy, I mean an examination of the way geographical concepts structure and enable practice in the world. Specifically, this book considers the role played by mobility and, necessarily, relative immobility, in people's geographical imaginations. These imaginations, I argue, are not simply colorful mental maps confined to the world of ideas. Rather they are active participants in the world of action. They inform judges, doctors, factory managers, photographers, government officials, lawyers, airport planners, and all manner of other people with the ability to mold the world we live in. They escape the bonds of individual dreams and aspirations and become social. They become political.

Some forms of geographical imagination tread lightly on the world and remain largely individualistic or context specific. They may be personal mental maps or ways of seeing and knowing specific to limited spaces and times. Others, however, can be called deep knowledges. These knowledges play a deep and abiding structuring role in the world we live in. One example

might be the division of public and private space—a form of geographical imagination that capitalist and patriarchal relations are based on. Yet it is possible to think of a world without distinctions between public and private space. Indeed, significant strands of Marxism, feminism, and anarchism have all done this. The division of public and private space, in other words, is a social construct—a product of history.

There are other elements of the geographical imagination, however, that it is not possible to abolish, even theoretically. One of these is mobility. Mobility is a fact of life. To be human, indeed, to be animal, is to have some kind of capacity for mobility. We experience the world as we move through it. Mobility is a capacity of all but the most severely disabled bodies. Unlike the division between public and private space, mobility has been with us since day one. Ubiquity, though, sometimes seems like banality. Perhaps its universal nature makes it seem uninteresting, but its universality is *precisely* what also makes it a powerful part of ideologies of one kind or another in specific times and places. Mobility, in human life, is not a local or specific condition. To talk of the social construction of mobility, or the production of mobility, is not to say that mobility itself has somehow been invented and can be made to disappear. It is not like the automobile or the novel. But neither is it like gravity or the hardness of diamonds. Automobiles and the novel have been produced by society and will one day be made redundant by society. Gravity and the hardness of diamonds existed well before society did, and no society can undo them. I argue that mobility, like place, inhabits a middle ground. It is inconceivable to think of societies anywhere without either, and yet any particular way we have of thinking about them is self-evidently socially produced. They are social productions but necessary ones. The fact that our bodies allow us to move means that the meanings, which are produced in a myriad of ways and are mapped onto mobility are all the more powerful. The ubiquity of mobility makes it possible for *particular* mobilities to be portrayed as more than particular—as fundamental, as natural. It is not possible to do this with automobiles or novels, as their historicity is obvious.

It is this status of a *necessary social production*, I argue, that makes knowledge surrounding mobility (like that surrounding other fundamental geographical concepts such as space and place) so important and so deeply implicated in the politics of the modern world. Stasis and mobility, fixity and flow, are the subjects of deep knowledges that inform any number of ways of seeing the world. For this reason, an understanding of the ways in which ideas about fixity and flow provide a profound undercurrent to thinking (which is closer to the surface of cultural life—law, medicine, activism, film, photography, planning, architecture, philosophy, and even geography itself) enacts a critical geosophy. It enables us to examine the role of geographical knowledges in the always political and always differentiated production of social life.

It is the distinction between fixity and flow that is the subject of chapter 2 in which I develop the notion of a metaphysics of fixity, place, and spatial order on the one hand, and a metaphysics of flow, mobility, and becoming on the other. The purpose of the chapter is to review a set of literatures about mobility and to show how these literatures are themselves part of a world in which fixity and flow structure action and thought in ideological ways. The chapter ends with a call for a fully developed politics of mobility that links mobilities at the scale of the body to mobilities across the globe.

Chapters 3, 4, and 5 consider the politics of bodily mobility. Chapter 3 outlines the way the photographer Eadweard Muybridge and the physiologist Etienne-Jules Marey attempted to represent mobility through the development of photographic techniques that made mobility intelligible in new ways. Chapter 4 continues this analysis through an examination of the factory-based motion-studies of Frederick Taylor and Frank and Lillian Gilbreth. I show how movement studies employed increasingly sophisticated representational strategies, not just to record the already existing movements of workers, but also to produce new, ideal kinds of movement invested with the moral glow of health, efficiency, and productivity. Chapter 5 is an account of the development of ballroom dancing in Britain in response to the proliferation of so-called *freak steps*, supposedly originating in the United States. This chapter thus unites the scale of bodily mobility considered in the two earlier chapters with a wider sense of mobility across the ocean. The development of a particularly British, and then Imperial style of dancing was developed in response to perceived American, and specifically black American, dances such as the Turkey Trot, the Shimmy, and the Jitterbug. Once again particular forms of appropriate, refined, and moral mobilities were produced at the same time as inappropriate, uncivilized, and immoral mobilities were railed against. Throughout these three chapters I argue that particular types of mobility are produced in relation to other, often allegedly pathological, mobilities that are threatening and excessive.

Chapters 6 and 7 focus on the role of mobility in the historiography and ideology of the United States. As well as being an important constituent of a national ideology of exceptionalism, mobility is shown to be central to discourses of rights, citizenship, and heritage. Chapter 6 considers the development of the right to mobility through an examination of Supreme Court cases over a one-hundred-year period, and argues that mobility as a right became central to the legal definition of the figure of the citizen. The chapter ends with a discussion of the activism of the Bus Riders Union of contemporary Los Angeles in order to suggest a progressive way