

Driving Spaces

*A Cultural-Historical Geography of
England's M1 Motorway*

Peter Merriman



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Driving Spaces

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To Mum and Dad

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Chapter One

Introduction: Driving Spaces

So, like earlier generations of English intellectuals who taught themselves Italian in order to read Dante in the original, I learned to drive in order to read Los Angeles in the original. . . . the freeway system in its totality is now a single comprehensible place, a coherent state of mind, a complete way of life, the fourth ecology of the Angeleno. . . . The freeway is where the Angelenos live a large part of their lives. . . . the actual experience of driving on the freeways prints itself deeply on the conscious mind and unthinking reflexes. As you acquire the special skills involved, the Los Angeles freeways become a special way of being alive. . . . (Banham 1971: 23, 213, 214)

The integrated [rural] freeway, married to its landscape, is an elegant composition in space, geared to high speed mobility. Its sculptural qualities can be enormous; it speaks of movement and the kinesthetic qualities of driving on it are vastly exciting. . . . It is further, a form of action calligraphy where the laws of motion generate a geometry which is part engineering, part painting, part sculpture, but mostly an exercise in choreography in the landscape. . . . At their best, these great ribbons of concrete, swirling through the land, give us the excitement of an environmental dance, where man can be in motion in his landscape theater. (Halprin 1966: 37)

. . . the Santa Monica/San Diego intersection is a work of art, both as a pattern on the map, as a monument against the sky, and as a kinetic experience as one sweeps through it. (Banham 1971: 89–90)

In the past decade, geographers have been drawing upon theories of mobility, embodiment, performance, materiality and practice in an attempt to provide increasingly nuanced understandings of the ways in which people more or less consciously and creatively inhabit and move through particular kinds of spaces, environments, places and landscapes.¹ Activities as diverse as dwelling in buildings, dancing, driving, walking and holiday-making are

increasingly being examined in studies across the social sciences and humanities which are sensitive to the embodied inhabitation of, and movement through, particular spaces. Of course, few of these practices are new, and there is a fairly long history of critical commentaries, explorations and aesthetic interventions by writers, artists, landscape practitioners, engineers, dancers, musicians and film-makers, as well as academics and cultural commentators, who have explored the relations and tensions between landscape, movement, practice, perception and being. This is evident in the opening quotations (above) by the California landscape architect and environmental designer Lawrence Halprin, and the English architecture and design historian and cultural critic Reyner Banham.

In their focus on the motorist's embodied experience of the vernacular landscape, Reyner Banham and Lawrence Halprin's writings in the 1960s and early 1970s paralleled other well-known studies of the driving landscape – including Donald Appleyard, Kevin Lynch and John Myer's study of Boston's urban expressways in *The View from the Road*, Robert Venturi, Denise Scott Brown and Steven Izenour's architectural study of the Las Vegas strip, *Learning from Las Vegas*, and J. B. Jackson's extensive writings on the vernacular American landscape (Appleyard et al. 1964; Venturi et al. 1972; Jackson 1997). Banham and Halprin, like J. B. Jackson before, asserted the importance of a driver's embodied skills, and their kinaesthetic experiences of both the freeway and the landscape.² Freeways are seen to be practised and experienced as 'places', as distinctive systemic environments which are bound up with people's everyday experiences and actions: 'The freeways create a new geography and a new sense of place' (Brodsly 1981: 46). While Banham was clearly fascinated with the distinctive, exoticized spaces of LA and its freeways, he expressed a similar appreciation for Europe's largest multi-level junction (known as 'Spaghetti Junction'), situated on the M6 at Gravelly Hill, Birmingham. When it was opened in 1972, he wrote a review of this 'complex-looking intersection' for *New Society*, preparing an itinerary for 'kinaesthetes' wishing to tour 'the inner complexities of this agreeable little suburban megastructure' by car (Banham 1972b: 84, 85). The article was just one of many commentaries Banham wrote during the 1950s, 1960s and 1970s about the vernacular landscapes and pop-modern architecture of post-war Britain. Banham repeatedly encountered and wrote about distinctive, though often quite ordinary, structures and environments, tracing the ecologies of particular landscapes, spaces and places.

In contrast to Banham, Lawrence Halprin did more than simply write about freeway design and landscaping. In the 1960s he was commissioned to prepare the San Francisco Freeways Report (1962–4) and Panhandle Freeway Plan and Report (1963) for the California Department of Highways, and in 1965–8 he served as one of eight urban advisers to the Federal

Highway Administrator of the US Department of Transportation (Halprin 1986). In his writings, Halprin drew parallels between driving, highway design and such creative and dynamic artistic practices as sculpting, painting, calligraphy, choreography and dancing. He collaborated with his wife, the avant-garde dancer Anna Halprin, drawing upon theories of kinetic art, choreography and embodied movement, and developing a form of movement notation ('motation') designed to enable 'generalized notation of any motion through space', whether choreographing dance or 'visualizing the highway experience' (Halprin 1966: 87). In his book *Freeways* Lawrence Halprin included a series of 18 photographs of Anna engaged in a 'dance sequence under the freeway', reflecting his thoughts on the aesthetic and kinaesthetic relationship between human movement, architecture and the landscape (Halprin 1966: 20–1).

What the writings of Banham, Halprin and many others indicates is that there is a rich history of writings on driving in the landscape, as well as work by cultural commentators, artists, landscape architects, engineers and others who have attempted to comprehend, choreograph, and at times represent and notate, the embodied, kinaesthetic skills, habits and experiences of driving in the landscape. In the past decade or two, anthropologists, art historians and geographers have increasingly argued that landscape be turned 'from a noun to a verb', being approached as 'a dynamic medium' (W. J. T. Mitchell 1994: 1) which is worked (D. Mitchell 1996, 2001), practised (M. Rose 2002; Cresswell 2003), inhabited (Hinchliffe 2003), dwelt in (Ingold 1993; Cloke and Jones 2001), and moved through (see also Wylie 2002, 2005; Cresswell, 2003). Landscape is 'tensioned, always in movement, always in making' (Bender 2001: 3). Following these different engagements with landscape and movement, the writings of Halprin and Banham may be seen to form one strand in a much broader genealogy of sensibilities to movement in the landscape.

In this book I examine different moments and movements in the production and consumption of the landscapes of a modern British motorway: the first sections of the London to Yorkshire Motorway or M1. I show how lobby groups, politicians, preservationists, wealthy aristocrats and a range of professions invented and envisioned future British motorways in the early twentieth century, before examining how the landscapes of the M1 were planned, designed, constructed, landscaped and used in the 1950s and 1960s. The landscapes of the M1 have always been in a state of becoming, being actively worked through the movements and actions of surveyors, migrant labourers, construction machines, soil, concrete, rainwater, maintenance workers, drivers and passengers. Vegetation grows on the motorway verges. New technologies for governing the movements of drivers have been incorporated into the motorway's structures. Individual motorway journeys, media stories and the products of children's writers, pop bands

and toy manufacturers have worked the landscapes and practices of the M1 into the national, as well as regional and local, imaginations. The landscapes of the motorway may be seen to be 'both a work and an erasure of work' (D. Mitchell 1996: 6), as particular movements and events, along with the effort involved in the design, construction, maintenance and use of these landscapes, are rarely evident or visible to motorway travellers.

In this introductory chapter I trace the theoretical background to my explorations of the geographies of the M1. In section one, I discuss the recent resurgence of work on mobilities in the social sciences and humanities, cautioning against suggestions that a 'new mobilities paradigm' is emerging. In section two, I discuss literatures on motor vehicles and driving, examining how the materialities of vehicles and practices of driving become bound up with distinctive subjectivities, ontologies, identities and mobilities, inculcating particular kinds of embodied skills and sensory engagements with the world. I argue against suggestions that driving is *asocial* and that roads are *placeless* spaces or 'non-places', tracing the distinctive ways in which drivers engage with their surroundings and communicate with other drivers. In section three, I examine how cultural commentators and scholars have tended to approach motoring as a purely visual experience, despite showing an awareness that motoring provides drivers and passengers with multi-sensory, kinaesthetic engagements with the landscape. I provide a detailed discussion of academic accounts of the visualities of motoring, before showing how a range of artists have explored the representational and non-representational dimensions of driving in the landscape. In section four, I examine both popular and academic writings on the histories and geographies of the modern road, highlighting the quite different status of 'the road' in British and American cultural imaginations. Finally, in section five, I outline the contents and principal arguments of the remainder of the book.

Mobilities

Movement, flow, fluidity and mobility are subjects of investigation across the natural, physical and social sciences. The collection *Patterned Ground* reveals how the flows and rhythms associated with such diverse phenomena as cities, glaciers, airports and lakes entwine and refract 'the natural' and 'the cultural' (S. Harrison et al. 2004). Human geographers have held a fairly long-standing interest in mobility, drawing upon a wide range of philosophical approaches – including positivism, phenomenology, Marxism and post-structuralism – to examine such things as the geographies of migration, cultural diffusion, transport, tourism and trade (Cresswell 2001, 2006). Mobility was frequently interpreted as an incidental, rational,

universal or dysfunctional by-product of processes occurring in particular places, but in the past decade there has emerged a more extensive and critical academic literature which identifies 'mobility' as an important dimension in the shaping and practising of societies and cultures, spaces, places and landscapes (Urry 2000; Cresswell 2001, 2006). Mimi Sheller and John Urry (2006a, 2006b; see also Urry 2003a; Hannam et al. 2006) have referred to a 'mobilities turn' and the emergence of a 'new mobilities paradigm' in the social sciences, reflecting an increasingly post-disciplinary or inter-disciplinary intellectual agenda, the ascendancy of particular strands of non-essentialist post-structuralist and feminist thought, and a focus on issues of identity, embodiment, performance, subjectivity, transnational migration, travel writing, globalization, tourism, mobile communications, the internet and the spaces of the airport, car and road. There is a danger that a language of 'turns' and 'paradigms' may lead academics to overstate the impact of this work, and overlook more firmly established lines of research (such as transport geography), as well as the diversity of these new agendas. Indeed, despite their talk of 'turns' and 'paradigms', Sheller and Urry are careful to argue that they are not 'insist[ing] on a new "grand narrative" of mobility, fluidity, or liquidity' that would repeat the mistakes of the wave of theorists who openly advanced 'nomadic theories' – celebrating, generalizing and frequently romanticizing the transgressive mobilities of the nomad, migrant and traveller – in an attempt to move away from sedentarist theories rooted in ideas of fixity (Sheller and Urry 2006b: 210; see also Kaplan 1996; Cresswell 1997, 2001).³ Sheller and Urry (2006b: 211) state that they are more concerned with 'tracking the power of discourses and practices of mobility in creating both movement and stasis', echoing Tim Cresswell's long-standing concern to move away from both a 'sedentarist metaphysics' and a 'nomadic metaphysics', to focus instead on the 'politics of mobility' (Cresswell 2002: 11): 'Mobility, like social space and place, is produced. . . any politics of mobility and any account of mobilities in general has to recognise the diversity of mobilities and the material conditions that produce and are produced by them' (Cresswell 2001: 20, 24).⁴

Modern western societies appear to *function* and *gain life* through the movements of all kinds of material and immaterial things, but they are heavily punctuated by sedentary assumptions and beliefs – for example, that citizens will have fixed dwellings, addresses, nationalities, and own or lease property (Cresswell 2006). Movement must be seen to occur for a (legitimate) 'purpose', and mobilities which are deemed unnecessary, subversive or pointless are frequently criticized and controlled by a range of authorities and commentators (Sibley 1994, 1995). Thus, while the movements of the business traveller, commuter, tourist, quarantined animal and air mail letter may be facilitated by politicians, businesses

and planners, the movements of gypsies, refugees and migrant workers are commonly criticized and closely regulated (Sibley 1994, 1995; Cresswell 2001, 2006).

Mobilities and materialities are intricately entwined. In *The Railway Journey* Wolfgang Schivelbusch explored how travellers experience the world through the 'machine ensemble' of the railway or vehicle/highway (Schivelbusch 1986: 24), but the materialities of passports, border fences and such seemingly mundane things as shoes and walking boots are also caught up with, and inseparable from, particular mobilities, subjectivities and ontologies (Michael 2000; Divall and Revill 2005; Sheller and Urry 2006b). What's more, mobile subjects/objects do not simply float across spaces, places and landscapes; rather, their very mobilities continually rework and shape these places and landscapes (Massey 1991, 2000, 2005; Cresswell 2002, 2003; cf. Morse 1998). Cities, for example, are 'spatially open and cross-cut by many different kinds of mobilities' (Amin and Thrift 2002: 3; see also S. Graham and Marvin 2001; Sheller and Urry 2006a), but in this book and throughout the remainder of this chapter, I am concerned with the mobilities, materialities and practices associated with driving, and the spaces of the car, road and motorway.

Driving, Space, Social Relations

Automobility is: 1. the quintessential *manufactured object* produced by the leading industrial sectors and the iconic firms within 20th-century capitalism . . . , and the industry from which the definitive social science concepts of Fordism and post-Fordism have emerged; 2. the major item of *individual consumption* after housing which provides status to its owner/user through its sign-values . . . 3. an extraordinarily powerful *complex* constituted through technical and social interlinkages with other industries . . . 4. the predominant global form of 'quasi-private' *mobility* that subordinates other mobilities . . . 5. the dominant *culture* that sustains major discourses of what constitutes the good life, what is necessary for an appropriate citizenship of mobility and which provides potent literary and artistic images and symbols . . . 6. the single most important cause of *environmental resource-use*. (Urry 2004b: 25–6)

John Urry has drawn upon theories of complexity to approach 'automobility' as a 'self-organizing autopoietic, non-linear system that spreads world-wide' and 'generates the preconditions for its own self-expansion' (Urry 2004b: 27). While I have reservations about the use of theories of complexity and systemic metaphors,⁵ Urry very succinctly and effectively summarizes the ways in which the car industry, cars and driving (not to mention other motor vehicles) are socially, culturally, economically, politically,

ethically and environmentally embroiled in our daily lives, whether we own a car, drive or not (Sheller and Urry 2000; D. Miller 2001; Wollen and Kerr 2002; Urry 2004b; Böhm et al. 2006). While ‘immensely flexible’, automobility may be seen to be ‘wholly coercive’, underpinning dominant assumptions about how people conduct and manage their lives across time and space (Sheller and Urry 2000: 743; cf. Morse 1998). Social scientists have recognized the importance of automobility for decades, but their discussions of the car and driving have been very specific and limited until fairly recently. Geographers have provided extensive studies of the modes of production associated with car manufacturing (Hudson and Schamp 1995), and the environmental implications and ‘external costs’ of car travel (Whitelegg 1997; cf. D. Miller 2001). Sociologists have focused on the working practices, unionization and affluence of the car worker (Goldthorpe et al. 1968–9; Beynon 1973; cf. G. Turner 1964), and the life and work of the lorry driver (Hollowell 1968), but it is only in the past decade or two that sociologists, anthropologists and geographers have begun exploring the more far-reaching ways in which cars (and occasionally other vehicles) are driven, consumed and shape our lives.⁶

Advertisers, car manufacturers, motoring journalists and drivers frequently suggest that it matters what vehicle or car we drive (on car advertising, see Wernick 1991; Dery 2006). Motor vehicles and their movements have long been enmeshed in gendered, racialized, sexualized, nationalized, localized and globalized processes of inclusion and exclusion, identity formation and stereotyping (Scharff 1991; Sachs 1992; O’Connell 1998; Katz 1999; R. Law 1999; Gilroy 2001; D. Miller 2001; Sanger 2001; Edensor 2004; Böhm et al. 2006; see chapter 5). Particular vehicles may be labelled as expensive, cheap, cool, youthful, boring, unreliable, or as masculine or feminine.⁷ Hot-rod enthusiasts, ‘boy-racers’ and other customisers attempt to rebuild, restore and restyle their cars in an attempt to differentiate, individualize and ‘improve’ their appearance and performance (Relph 1976; Moorhouse 1991). The materiality of cars and vehicles is intimately entwined with the spaces, embodied actions, identities and subjectivities of *driving* (as well as simply *owning* a car), and it is important to recognize that there are clear differences between the experiences and embodied actions of drivers and passengers:

In contrast to the passenger, the driver, in order to drive, must embody and be embodied by the car. The sensual vehicle of the driver’s action is fundamentally different from that of the passenger’s, because the driver, as part of the praxis of driving, dwells in the car, feeling the bumps on the road as contacts with his or her body not as assaults on the tires, swaying around curves as if the shifting of his or her weight will make a difference in the car’s trajectory, loosening and tightening the grip on the steering wheel as a way

of interacting with other cars. . . . we must appreciate how driving requires and occasions a metaphysical merger, an intertwining of the identities of driver and car that generates a distinctive ontology in the form of a person-thing, a humanized car or alternatively, an automobilized person. (Katz 1999: 32, 33)

If politicians, environmentalists, economists and indeed geographers want to understand why people have an enduring attachment to their cars – to persuade them to move to more environmentally sustainable alternatives – it is vital that they understand the social relations, embodied practices and ontologies associated with driving. As Jeffrey Schnapp has shown, motor vehicles were the first, and remain the only, popular motorized ‘*driver-centred*’ mode of transportation, combining the sense of freedom, control, independence and privacy that had previously been experienced with the bicycle and horse-drawn chariots and phaetons, with the sublime aura, mystery and seemingly effortless power, range and speed of mechanically powered modes of transport (Schnapp 1999: 3; see also Kern 1983; Thrift 1990; Sachs 1992). Motor vehicles shape our being, reconfiguring our sense of self and personal mobility. Through the act of driving, ‘people’ become ‘vehicle drivers’ – hybrid, collective or cyborg figures whose subjectivity and objectivity are (re)configured through the contingent, partial and momentary practice of dwelling in a vehicle and driving along the road (see Ross 1995; Graves-Brown 1997; Lupton 1999; Katz 1999; Michael 2000, 2001; Sheller and Urry 2000; Urry 2000, 2004b; Beckmann 2001; D. Miller 2001; Dant 2004; Edensor 2004; Featherstone 2004; Böhm et al. 2006; Merriman 2006b). As drivers gain experience of, and familiarity with, their vehicles, so the embodied skills, dispositions and actions of driving appear to be performed and practised in relatively unconscious, ‘automatic’, non-cognitive and unreflexive ways: ‘. . . the experience of driving is sinking in to our “technological unconscious” and producing a phenomenology that we increasingly take for granted but which in fact is historically novel’ (Thrift 2004: 41). As an embodied, habitual, unreflexive and, some might say, non-cognitive activity, driving can appear fairly effortless, ordinary and mundane (Dant 2004; Featherstone 2004). Driving seems to entail a process of perpetual day-dreaming or forgetting, ‘a spectacular form of amnesia’ (Baudrillard 1988: 9), and a ‘detached involvement’ with one’s surroundings (Brodsly 1981: 41; Featherstone 1998; Joyce 2003). Margaret Morse (1998) has described this as a process of perpetual ‘distraction’, while Jonathan Crary, in his work on attention and modern culture, describes the ‘diffuse attentiveness and quasi-automatism’ which is characteristic of both freeway driving and television watching (Crary 1999: 78). This is until something draws our attention, we become tired, lost or caught in a jam, and the ‘orderliness of driving in traffic’ breaks

down (Lynch 1993: 155; Merriman 2006b; see also Latour 2005). As architectural critic Raymond Spurrer remarked in 1959: 'The driver should be as unconscious of the road itself as he is of what is going on beneath the bonnet. When either mechanism or road begins to obtrude, something has gone wrong' (Spurrer 1959: 245). As I discuss in chapters 3 and 5, a large number of experts and authorities – including landscape architects, engineers and civil servants – have stressed that carefully designed carriageways, signs and roadside planting can help maintain but must not distract the motorway driver's attention – forming a minor element in broader programmes to shape the experiences and conduct of motorway drivers (Merriman 2005b, 2006b).

Governing drivers and other road users has always been a contentious, politically sensitive activity. In early twentieth-century Britain, motoring offences brought many otherwise respectable, law-abiding, upper- and upper-middle class citizens into the nation's courts for the first time (Emsley 1993). As car ownership expanded, successive governments worked hard to introduce new motoring legislation and taxation without losing the support of the motoring public (in the past three decades this has been in the face of increasing global oil prices and pressure from environmental groups). Civil servants have long realized that to effectively govern the conduct of motorists across an extensive road network they need to supplement regulatory, disciplinary and juridical frameworks with liberal and educative programmes and technical devices – such as the Highway Code and Motorway Code (see chapter 5) – which facilitate and encourage motorists to learn new techniques for governing their own conduct and the movements of their vehicles (Merriman 2005b; cf. Joyce 2003).⁸ Drivers may interpret and resist the formal rules of the road in a variety of ways, but the limited extent to which they can drive 'differently' or 'creatively', coupled with the severe consequences of rule-breaking and inattentiveness, lead them to perform in more or less socially acceptable ways. A misjudged turn of the steering wheel, press on the accelerator pedal or failure to glance in a mirror may result in a fatal accident, and yet such events are so frequent and 'normal' that it is only when they involve ourselves, friends, family or famous individuals that we look beyond the de-personalized and sanitized accident statistics and register the embodied effects and affects of such incidents (see chapter 5).

Driving is an important social, cultural, spatial practice, but it is not uncommon for academics to approach driving as a solitary, desensitizing, dislocated or asocial activity which generates experiences of placelessness (see Freund and Martin 1993).⁹ In *Place and Placelessness* the humanistic geographer Edward Relph acknowledged that cars and other 'personal machines . . . offer us new options, comforts and experiences' (Relph 1976: 129), but they also desensitize us to, and separate us from, our

surroundings, with modern twentieth-century roads representing both a feature and symptom of a flat, placeless geography:

Roads, railways, airports, cutting across or imposed on the landscape rather than developing with it, are not only features of placelessness in their own right, but, by making possible the mass movement of people with all their fashions and habits, have encouraged the spread of placelessness well beyond their immediate impacts. (Relph 1976: 90; see also Kunstler 1994)

French anthropologist Marc Augé has made similar claims about the spread of 'non-places' such as motorways and airports in the late twentieth century, an era of 'supermodernity' (Augé 1995). On one level, Augé's descriptions appear to reflect the feelings of blankness, forgetting, indifference and ubiquity which *some*, perhaps many, travellers and consumers experience in fairly standardized, mundane and familiar environments (cf. Morris 1988). As Margaret Morse argues, 'practices and skills' such as driving and shopping constitute 'the barely acknowledged ground of everyday experience', and 'can be performed semiautomatically in a distracted state' (Morse 1998: 102; see also Crary 1999). Drivers experience 'a partial loss of touch with the here-and-now', all of which works to constitute 'an ontology of everyday distraction' (Morse 1998: 99; see also Crary 1999). Morse (1998: 103) goes on to describe the isolation and 'derealization' of freeway driving, but like Augé she overstates and over-generalizes the difference, novelty and dislocation of the experiences and environments associated with motorway driving. Firstly, as I have argued elsewhere, it is unnecessary to delineate a new species of place – i.e. 'non-place' or 'non-space' – to account for the detachment, solitariness, boredom and distraction which *some* drivers or passengers *may* experience on motorways; feelings which are just as likely to surface when one is at home or work (Merriman 2004b, 2006b). Secondly, Augé and others tend to overlook the history of such 'barometers of modernity' or supermodernity, for commentators have, in previous decades and centuries, associated feelings of boredom, dislocation, illegibility, excitement and shock with other previously new transportation and communication technologies, such as the railway in the nineteenth century (Thrift 1995: 19; see also Schivelbusch 1986; Crary 1999; Merriman 2004b). Thirdly, while Augé (1995: 79) argues that places and non-places are 'like palimpsests', being 'ceaselessly rewritten', it is only in his later writings and interviews that he supplements his auto-ethnographic reflections on travelling through spaces of supermodernity with an acknowledgment of the different experiences and degrees of access that individuals/groups – whether commuters, workers, or refugees – may have in/to such spaces as the airport (e.g. Augé 1999, 2004; cf. Cresswell 2001; M. Crang 2002a). Fourthly, Augé and other commentators often

fail to examine the quite different embodied engagements and experiences of the driver and passenger. Fifthly, and finally – as Bruno Latour (1993) points out – Augé fails to register the many mediated or distanced social-material relations and entanglements which emerge in these spaces, for he is attached to the idea that sociality is a function of face-to-face, unmediated communication. Non-places, Augé states, ‘are the spaces of circulation, communication and consumption, where solitudes coexist without creating any social bond or even a social emotion’ (Augé 1996: 178).

At first glance, motorway driving may appear to produce such experiences of detachment and solitude, but as a large number of sociologists, psychologists, anthropologists, geographers and ethnomethodologists have stressed, driving is a complex *social* practice and activity, and drivers do communicate and interact with people and all manner of things, inhabiting and consuming the spaces of the car and road in a myriad of distinctive ways (see, e.g., Goffman 1971; Dannefer 1977; Lynch 1993; Katz 1999; Amin and Thrift 2002; Featherstone 2004; Laurier 2004). In the contemporary West we tend to take our relations with cars and roads for granted, ‘think[ing] our world through a sense of the self in which driving, roads, and traffic are simply integral to who we are and what we presume to do each day’ (D. Miller 2001: 3). But cars and the spaces of the road have been, and are, shaped, consumed and inhabited in quite distinctive ways in different societies at different times, whether in early twentieth-century Britain (O’Connell 1998), contemporary India (Sardar 2002; Edensor 2004), Trinidad (D. Miller 2001), Cuba (Narotzky 2002) or amongst the Aborigines of the Pitjantjatjara lands in South Australia (Young 2001), to name but a few examples (see also Wollen and Kerr 2002). Drivers and passengers inhabit different vehicles in different ways, playing car games with other passengers, doing office work while on the move (Laurier 2004), talking to family members, listening to recorded music or the radio, singing (Brodsly 1981; Bull 2001, 2004; Schwarzer 2004), having sex in lay-bys, or day-dreaming and contemplating (Edensor 2003). Despite assertions to the contrary by some transport economists, driving-time, like all travel time, can be productive (Dant and Martin 2001; Lyons and Urry 2005). Driving entails intense ‘affective and embodied relations’, giving rise to a range of emotions and feelings, from fear and anger, to excitement (Sheller 2004: 221; see also Katz 1999). Drivers get frustrated, all too aware of the ‘expressive limitations of their vehicles’, and the fact that other drivers appear ‘deaf to one’s own concerns’ (Katz 1999: 28; see also Lynch 1993). In extreme cases, frustrated and angry vehicle drivers may engage in acts of violent ‘road rage’ (see Katz 1999; Lupton 1999; Michael 2000, 2001). In other situations, drivers flash headlights, use indicator lights, sound their horn, shout, or make polite or rude gestures in an attempt to communicate their feelings or intended movements (see Katz 1999). Drivers continually

predict and assess the actions and performance and movements of other 'vehicle drivers', judging motorists by their movements and stereotyping them according to their gender, ethnicity, age, class, nationality, or the appearance of their car (O'Connell 1998; Katz 1999).

Driving, Landscape, Visuality

Drivers inhabit, navigate and move through the spaces and landscapes of the road in distinctive, embodied ways facilitated by a range of technologies (Thrift 2004). Driving is not solely a visual experience, where 'the sights, sounds, tastes, temperatures and smells of the city and countryside are reduced to the two-dimensional view through the car windscreen' (Urry 2000: 63; see also Sheller and Urry 2000). An array of 'privatizing technologies' have affected the driver's and passenger's sensations of movement and their surroundings (Urry 2000: 63), but even today's air-conditioned, heated, suspended cars with ABS brakes, modern glazing, power steering, satellite navigation and sophisticated stereos afford multi-sensory affects and engagements with the landscape. Nevertheless, while a few academics and commentators have focused on drivers' multi-sensory and kinaesthetic inhabitations of the world, the vast majority of writings and interventions focus on the driver's or passenger's visual experiences of the landscape, and in these accounts the motorist's *vision* is rarely seen to be *embodied with*, and inseparable from, other sensory and kinaesthetic apprehensions of their surroundings (see Bull 2004, on the driver's audio-visual experiences).

In *America* Jean Baudrillard (1988), perhaps unsurprisingly, focused his attention on the visual spectacle of driving along the Los Angeles freeways and desert highways. Driving at speed through the desert was seen to create an 'invisibility, transparency or transversality in things', and what Baudrillard, citing Paul Virilio, termed an 'aesthetics of disappearance' (Baudrillard 1988: 7, 5). Baudrillard incorporates such effects and experiences into his own geography of LA and the American desert, but when Virilio addressed similar themes in his writings he abstracted the practices and experiences of driving from specific landscapes, spaces and times, tracing a dystopian, almost apocalyptic, futuristic, transhistorical and dislocated geography which effaced the multi-sensory nature of driving. In *Polar Inertia* Virilio looked to a future where 'the audiovisual feats of the electronic dashboard will prevail over the optical qualities of the field beyond the windscreen', and 'the temporal depth of the electronic image prevails over the spatial depth of the motorway network' (Virilio 2000: 15). Human physical movement would cease to be important, as 'dynamic automotive vehicle[s]' such as cars are replaced by 'the static *audiovisual vehicle*',

marking 'the definitive triumph of sedentariness' (Virilio 2000: 18). Here, and elsewhere, Virilio's future predictions appear to fly in the face of contemporary sociological studies which demonstrate the continuing importance of corporeal travel and physical co-presence, alongside the increasing use and importance of virtual communication technologies (Urry 2002; 2003a). Virilio's predictions emerge from a fascination with the geographies of the screen, and comparisons between the experiences of driving and the visualities of the cinema, television and computer screen (see also Morse 1998). In *The Aesthetics of Disappearance*, Virilio sees the 'voyeur-voyager in his car' as analogous to 'the moviegoer', who 'knows in advance what he's going to see, the script' (Virilio 1991: 67–8). Windscreen and cinema screen are conceptualized as comparable framing devices or surfaces of projection, and here Virilio's thoughts parallel the writings of a long line of film theorists, social scientists and cultural commentators who have drawn parallels between a cinematic gaze and automotive visibility (see Friedberg 1993, 2002; Dimendberg 1995; Morse 1998; Larsen 2001; M. Crang 2002b; Schwarzer 2004; also Ross 1995). As French writer Octave Mirbeau remarked in 1908 on the impact of the motor car on 'modern man': 'Everywhere life is rushing insanely like a cavalry charge, and it vanishes cinematographically like trees and silhouettes along a road' (cited in Kern 1983: 113).¹⁰ Cars, cinema and trains may be seen to act as 'vision machines' and virtual or physical transportation machines, but their users have had, and do have, very different motivations and embodied engagements with the spaces and landscapes which are 'projected' or 'refracted'.

It is useful, here, to compare and contrast the visualities enabled by railway travel with the visual engagements of the car driver and passenger. Schivelbusch famously argued that railway travel led to the emergence of a new mode of perception, a way of seeing that was 'panoramic', as the relative comfort, smoothness and speed of the ride led to a sense of detachment from the landscape, and the cultivation of distinctly different embodied practices and experiences from those associated with stage coaches (Schivelbusch 1986). Landscapes appeared to lose their depth, becoming 'evanescent' glimpsed scenes, with passengers trained in the arts of landscape painting and viewing finding the view disorienting and disagreeable: 'Those who were conditioned to looking at a landscape as a landscape painting, with a detailed foreground directing the eye to middle ground and distance, discovered the view from a speeding train could not be contained within this structure and that attempts to do so were unnerving, sometimes sickening' (Daniels 1985: 16). Observers compared the evanescence and apparent scrolling of the landscape past the train window with the popular panoramic and dioramic shows of the early nineteenth century, and Daniels remarked that 'those who enjoyed going to the panorama

shows relished a spectacle more refined passengers found difficult to stomach' (Daniels 1985: 16).

A few academics have suggested that motorists experience the landscape in a panoramic manner similar to that of railway travel (Dimendberg 1995; Ross 1995), but while back-seat passengers may observe similar visual effects when staring out of the side windows of a car, a broad range of academics, cultural commentators and artists have emphasized that the visualities and embodied engagements of the driver and front-seat passenger are quite different to that of the railway passenger (Schwarzer 2004; also Liniado 1996; Featherstone 1998). Reyner Banham commented on the difference in *New Society* in 1972:

The railway view presents a passive observer with a continuous panorama that unrolls from left to right, or other way about. One is very detached from it as its contents slide past according to the laws of parallax. Richard Hamilton once did a series of paintings about this very effect; he also did one only through a car windscreen and then gave up.¹¹

For the car-borne view is neither detached nor in parallax. The observer plunges continuously ahead into a perspective that is potentially dangerous and demands his active attention (nor is the passenger passive: watch his feet and hands, listen to his comments and warnings). (Banham 1972a: 243)

Mitchell Schwarzer associates this plunging perspective with what he terms 'dromoscopic perception', with 'a headlong immersion into a free space of movement around which buildings recede' (Schwarzer 2004: 99). This complex, plunging visual perspective is inseparable from the differentiated, performative, embodied actions of both driving *and* passengering, but throughout the twentieth century critical commentators, architects, artists and others differed in their opinions on the extent to which the dynamic, embodied experiences and visualities of car travel could be apprehended or represented.

On the one hand, engineers, architects, urban designers, landscape architects and psychologists have attempted to comprehend, codify and at times model the visual experiences of drivers *and* passengers. Since at least the 1940s, highway engineers have developed mathematical formulae to ensure that the aesthetic appearance of the alignment and curvature of roads is not irritating or confusing for drivers (Merriman 2001). In the early 1960s, as part of their study of Boston's urban expressways, the urban designers Donald Appleyard, Kevin Lynch and John Myer developed a system for 'recording, analyzing and communicating' the visual sequences presented to the car traveller (Appleyard et al. 1964: 19). The team were motivated by 'a desire to find a visual means for pulling together large urban areas', and they argued that high-speed expressways could provide