

Moto-mobilities: geographies of the motorcycle and motorcyclists

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Abstract

This paper draws upon and seeks to extend accounts of systems of automobility through an examination of geographies of the motorcycle and motorcyclist—or what we term ‘moto-mobilities’. We utilise the figure of the motorcycle to raise the importance of analyzing alternative mobilities: to consider how they appeal to different travelling dispositions and emotions; how they have been represented; and how they have been produced, marketed and consumed. The paper first reflects upon the experiences and embodiment of the motorcycle-rider; second, evaluates representations of moto-mobility; and finally attends to the materiality of mobility via an examination of the economy of motorcycle qualities.

Introduction

In recent years social scientists have become increasingly interested in concepts of ‘automobility’ and in so doing have provided new ways of invigorating studies of transport and movement (Thrift 1996; Urry 2000; Sheller and Urry 2000; Beckmann 2001; *Theory, Culture and Society* Special Issue 2004). Urry conceptualizes automobility as a complex “self-organizing autopoietic, non-linear system that spreads world-wide, and includes cars, car-drivers, roads, petroleum supplies and many novel objects, technologies and signs” (2004, 27). That such a system has profound consequences for the spatio-temporal configurations, restructurings and practices of peoples’ everyday lives is one of its appeals for geographical research and analysis. This paper attempts to respond to Sheller and Urry’s (2006, 209) call for researchers “to open up all sites, places and materialities to the mobilities that are always already coursing through

them.” As Binnie *et al* suggest, “different modes of mobility—cars, trains, buses, trams, aeroplanes, bicycles, walking—offer up different challenges for thinking through how mobility is produced” (2007, 169).

Although existing literature identifies a range of different mobilities and asserts that the ‘car’ as object is not supposed to be central to the concept and understanding of automobility—which rather is a “complex amalgam of interlocking machines, social practices and ways of dwelling” (Sheller and Urry 2000, 739)—the car nevertheless has provided the starting point for most analysis to date. So for example, we have had studies of car driving in cities (Thrift, 2004) and on motorways (Merriman 2004); accounts of the feelings and pleasures cars evoke more generally (Sheller 2004); and examinations of their importance to concepts of nationhood and national identity (Edensor 2004; Koshar 2004). Other forms of mobility by comparison have received much less attention (although see Border 2001; Fincham 2004, 2006; Jones 2005; Spinney 2006).

What is apparent from the list presented in Binnie *et al.*’s (2007) quotation above—and is of central concern in this paper—is that one form of mobility circulating within this system appears to be missing from the literature of automobility altogether—the motorcycle. That the motorcycle is invisible is more than a little ironic. Cars pulling into the paths of ‘unseen’ motorcycles are one of the most common forms of motorcycle accident in advanced industrial economies (Maxwell, 1998). In the UK such statistics prompted a government-sponsored “*How close does a biker have to be before you see them?*” road safety advertising campaign in 2006 and are the basis of the concept—well known within motorcycle communities—of the ‘SMIDSY’ collision (‘Sorry Mate I Didn’t See You’; see: www.smidsy.org.uk).

Our concern with the motorcycle in this paper, however, reaches beyond that of road safety. One aim is to attend to the motorcycle's relative absence within social scientific literatures more generally, beyond some tentative connections between motorcycle manufacturing and Fordist/postfordist transitions (Cenzatti 1990) or literature which has tended to position 'the biker' as a distinctive subcultural group (Willis 1975; 1978; Hebdige 1979; 1988). More centrally, however, we seek to position the motorcycle within the automobility literature in order to extend and broaden the scope of that work. Cars of course do currently dominate most systems of automobility— often with pernicious consequences for other mobilities and the production of the built environment more generally—and this partly explains why they appear dominant within the academic literature. Yet such a fixed gaze inhibits a more complete understanding of interconnected systems of automobility, particularly when authors seek to visualize post-car systems where it is not the necessary structural prerequisite for the organization of everyday life (Beckman 2001).

In part, therefore, the paper opens up concern with what is particular about moto-mobility compared to other modes of travel. This involves understanding motorcycles and other powered two-wheel vehicles (PTWs) such as scooters and mopeds, as both distinctive objects in production and use worldwide, as well as a set of experiences, such as the riding techniques, strategies, pleasures and risks of powered two-wheel transportation and how these are felt and sensed by riders and pillions. More generally, we use the figure of the motorcycle to raise the importance of analyzing alternative mobilities to that of the car: to consider how they appeal to different travelling dispositions and emotions; how they have been represented across time and space; and how they have been produced, marketed and consumed. For Cresswell (2010, 18), "mobility involves a fragile entanglement of physical movement, representations and practices."

In an analogous vein, this paper seeks to explore first, the experience and embodiment of the motorcycle-rider; second, representations of moto-mobility; and finally attends to the materiality of mobility via an examination of the economy of motorcycle qualities.

The Motorcycle-Rider

We begin by exploring “the complex sensuous ‘relationality’ between the means of travel and the traveller” (Hannam et al., 2006, 15) within the context of the motorcycle. Travelling by motorcycle, or other forms of powered two wheel vehicle (PTW), would appear to be a precarious means of what Thrift (2004, 49) has termed “bodying forth”.¹ In the UK, for example, motorcyclists are 46 times more likely to be killed or seriously injured per kilometre travelled than car drivers (DoT 2006). Consequently, a useful entry point for enquiry into ‘moto-mobility’ is to understand why bodies and identities should be predisposed to such forms of travel. In this regard it is useful to counterpoise the utilitarian benefits of motorcycles and PTWs with their uses for leisure and pleasure, while recognizing that such a distinction is never clear cut.

Moto-utility: affordability and manoeuvrability

The relative affordability and flexibility of motorcycles and other PTWs, particularly in relation to the car, is central to their role and importance geographically and historically across different national landscapes and systems of automobility. For example, after World War I the number of motorcycle manufacturers in the USA drastically declined following the success of cars such as Ford’s Model T (Walker 1997). In the UK the motorcycle along with the sidecar was to remain a key feature of the transport system and mainstay of family transportation for much longer, particularly in the austere conditions after World War II. However, here too the arrival in the 1960s of relatively inexpensive family cars, such the Austin Mini and the Morris Minor, was to dramatically undermine the fortunes of key manufacturers (Brown 2005).

In the current era it is important to recognize global variations in the number of motorcycles and PTWs and the character of their uses and users. For example, of total worldwide sales of 38.5 million in 2008, over 85% were within the developing economies of Asia – notably China, India, Indonesia, Thailand and Taiwan – the majority of which were small, low cost and low power utility vehicles (JAMA, 2006; IMMA, 2010). Globally there are over 301 million PTWs in circulation and over 94% of this ownership is in developing world contexts (IMMA, 2010). Such vehicles provide affordable everyday transport for families and workers and are used for commercial and public service activities. In many developing world cities and localities they have a numerical significance much greater than the car and are a major feature of the movements and circulations of such environments.

In Western and Northern contexts too, motorcycles and PTWs are of utility given their practicality and manoeuvrability across increasingly congested landscapes of automobility. A number of authors have pointed to the ambivalent and contradictory nature of the car, as it struggles to deliver freedom and flexibility to negotiate the unbundled territorialities and fragmented social practices that it institutionalizes, standardizes and brings forth in the first place (Beckman 2001; Urry 2004). Such a contradiction is underpinned not only by rising numbers of cars but also by changing structures of automobility governance and surveillance – such as the introduction of congestion charging – which are perceived as disciplining and restraining the character of car movement (Featherstone 2004). Motorcycles and PTWs in certain contexts offer alternative strategies of movement and ways of negotiating some of these contradictions. However, the resulting spatial practices, encounters and juxtapositions with other traffic often lead to tensions and conflicts. Authors have begun to examine the adaptive moves and subversive strategies used in battles over space for other mobilities, such as cyclists in cities

(Jones 2005; Fincham 2006), urban skateboarders (Borden 2001) and even snowboarders and skiers in winter resorts (Edensor and Richards 2007). In a similar vein commentators have highlighted the hostility and ‘disciplinary gaze’ of some car drivers toward other forms of ‘user embodiment’ that use unfair tactics to violate accepted codes and conventions of the road (Thrift 2004; Edensor 2004). However, what might be described as the “practical embodied performances of the choreographies of the road” (Sheller 2007, 180) have yet to be fully articulated for motorcyclists, beyond discussions in consumer magazines (Oxley 2007); and there are some interesting contrasts with other forms of mobility. For example, unlike bicycles, motorcycles because of their speed, acceleration and regulations relating to road use, are involved in driving manoeuvres and strategies of negotiation with cars across all highway landscapes, from congested cities to main roads and motorways. Consequently, motorcyclist practices, such as queue jumping, filtering between slow moving or stationary traffic and lane-splitting fast moving traffic, can be perceived by car drivers to be particularly transgressive acts (Taylor and Marquez 2000). What might be frustrating for some may evoke feelings of *schadenfreude*, freedom and liberation for others, and it is in this vein that we turn to consider the pleasures of motorcycling.

Moto-leisure: the pleasures of motorcycling

Given its interest in social geographies of flows and movement, an important aim of the automobility literature has been to construct understandings of the emotional geographies and sensual experiences provoked by automobility and the kinds of embodied skills and practices involved in driving (Thrift 2004; Sheller 2004; 2007). In this section a focus on the leisure uses of motorcycles opens up engagement with the expressive side of this form of mobility; its pleasures and tactile affordances, along with the reflexive ways individuals manage the risks

associated with this means of travel. Of course, the notion of leisure use is not unproblematic, since the sensual experiences associated with such forms of movement might be experienced on the most utilitarian of machines and during the most banal practices of everyday life. But it is important to recognize that an important positioning of the motorcycle is as a leisure commodity, particularly within the more affluent markets of Europe and North America. The social construction and marketing of its pleasures, therefore, is an important component of motomobility and one that we introduce below and then explicitly address in the final section of the paper.

Given that a motorcycle is ridden rather than driven it inevitably demands a range of differently embodied skills and 'kinaesthetic investments' (Sheller 2007, 180), many of which may appear paradoxical to car drivers, such as the intuitive process of 'counter-steering' to the left in order to move through right handed bends, and vice versa. However, it is perhaps the physicality of motorcycle riding that would appear to be a central theme in narratives expressing the motivations of those disposed to risk riding; and the sensuous experiences and involvements motorcycles arouse. T.E. Lawrence, an iconic advocate of motorcycling, revels in such physicality in his biographical novel *The Mint*:

The burble of my exhaust unwound like a long chord behind me. Soon my speed snapped it, and I heard only the cry of the wind which my battering head split and fended aside. The cry rose with my speed to a shriek: while the air's coldness streamed like two jets of iced water into my dissolving eyes...Like arrows the tiny flies pricked my cheeks: and sometimes a heavier body, some house-fly or beetle, would crash into face or lips like a spent bullet (1955, 199-200).

This sense of a profound engagement with geography and environment is further demonstrated by John Berger:

Except for the protective gear you're wearing, there's nothing between you and the rest and the world. The air and the wind press directly on you. You are *in* the space through which you are travelling. There is no vessel around you. But also, because you are on two

wheels and not four, you are much closer to the ground...By closer I mean more intimate with. The surface of the road, for instance. You are conscious of all its possible variations, whether it offers grip or is smooth, whether it's new or used, wet, damp or dry, where there's mud or gravel, where it's painted white (painted surface is always more slippery), where there's metal, where the wind blows dust, where ruts are being worn – all the while you are aware of the hold of the tyres or their lack of it on the varying surfaces, and you drive accordingly (1992, 194-195).

In a similar vein J B Jackson's classic 1958 essay "The Abstract World of the Hot-Rodder" seeks to capture the distinctive inhabited experience of movement through landscape on a motorcycle, opening up new approaches to landscape study in the process:

...the traditional way of seeing and experiencing the world is abandoned; in its stead we become active participants, the shifting focus of a moving, abstract world; our nerves and muscles are all of them brought into play (Jackson, 1997, cited in Wylie, 2007, 52-53)

It is interesting to contrast such accounts with attempts to theorize the trajectories of movement and embodiment within the car. One of the most prominent ideas to emerge in the automobility literature is that complex technological innovations designed to assist the act of driving, along with communication and entertainment systems embedded within car interiors, are increasingly detaching car drivers from sensory engagement with the environments through which they are travelling. Instead, drivers become wrapped up and cocooned in a 'multi-tasking environment' (Featherstone 2004) and 'sonic envelope' (Bull 2004) which insulates and desensitizes them from the dangers of other traffic and the complexities of travelling at speed. Drawing upon the work of Latour (particularly 1992; 1993) authors point to how computer and other technologies increasingly mediate the act of driving, thereby blurring boundaries between humans and non-humans and inserting quasi-human 'delegates' or 'actants' into the car governance process (Miller 2001; Beckman 2001; Thrift 2004; Dant 2004). The result is a hybrid 'car-driver' assemblage and new forms of embodiment and phenomenology which mediate how car users sense and inhabit the world.

Unlike the motorcycles ridden by Lawrence (on one of which he was eventually killed in 1935), some high-value modern motorcycles also have begun to embody driver aids and safety mechanisms, such as servo-assisted anti-lock braking systems and traction control, which to some degree mediate rider decision making. However, technological aids are still relatively rare and the motorcycle remains a roofless machine that falls over without human support. Thus the notion of a ‘motorcycle-rider’, equivalent to the ‘car-driver’ in the sense of increasing environmental detachment is unlikely. Rather, as Berger’s (1992) account suggests, the ‘motorcycle-rider’ can be thought of as a very different kind of hybrid assemblage, one in which bodily exposure and risk is omnipresent and one wherein powers of geographical monitoring, assessment and instantaneous reaction, together with what might be termed ‘affective’ insight (see Thrift 2003; 2004) are of paramount importance. This of course is precisely what underpins the appeal of the motorcycle:

The fastness that counts most is that between decision and consequence, between an action, which is often a reflex action, and its effect...Other vehicles...are not as physically close to your body, and none of them leave your body so exposed. From this comes the sensation that the bike is responding as immediately as one of your own limbs – yet without your own physical energy being involved. (If your imaginative energy in the form of foresight is not involved, then heaven help you) (Berger 1992, 195; bracket in original).

Indeed, in contradistinction to the car, technological change for the motorcycle-rider may demand heightened bodily agility and dexterity, to handle the physical forces and consequences of faster accelerating (and stopping) machines and to manage the risks of collisions with car-driver assemblages increasingly cocooned and anesthetized from the presence of other road users (Taylor and Marquez 2000).

If many forms of travel are becoming increasingly mundane, quotidian and banal (Binnie *et al.* 2007), it should be clear that the motorcycle experience as potentially extraordinary,

engaging and liberating would also seem to be an important part of its leisure appeal. As Hutch (2007, 1) has suggested, popular narratives about the motorcycle “could be thought to be strung out on a trajectory that stretches from a sense of what life ordinarily is to what it might become.” Geographies of travel and speed underpin such transcendence, elements not exclusive to the motorcycle (see Cresswell 1993), but nevertheless prominent within many narratives. For example, the experience of personal transformation and change through the journey is evident in Robert Pirsig’s novel of spiritual enlightenment *Zen and the Art of Motorcycle Maintenance* (2000 [1974]); whilst Che Guevara achieves a political awakening through his Latin American travel documented in *The Motorcycle Diaries* (2003) and Ted Simon finds self discovery through his round-the-world motorcycle tour documented in the classic *Jupiter’s Travels* (1979). John Berger, meanwhile, evokes this sense of personal translation even through more localized motorcycle touring:

After a few hours of driving across the countryside, you feel you have left behind more than the towns and villages you’ve been through. You’ve left behind certain familiar constraints. You feel less terrestrial than when you set out (1992, 197).

Berger is also eloquent in his evocation of the transcendent qualities of speed and risk, of how a sense of freedom is achieved through an apparently irrational activity (see also Garvey 2001 on car cultures):

There are those that reproach motor-cyclists for “flirting with death.” It’s true that the proportion of fatal accidents is higher for motorbikes than other vehicles. Yet the reproach doesn’t convince me. Perhaps motor-cyclists take a certain distance from the domain of the everyday life – but it is not in order to dance with death, but rather to be unencumbered. (1992, 196)

This sense of how a speeding moment on a motorcycle can overcome the existential tyranny evoked by human consciousness of linear historical time and inevitable mortality is also assessed by Hutch (2007). He argues that recreational motorcyclists fight ‘terror with terror’ since speed

“...transforms ordinary space and time as an historical flow, with its beginnings, middles and endings, into the ‘here and now’ (which) is an experiential reality in which time stands still and, in doing so, confers a sense of sacrality upon the place where such interruptions to temporality occur” (Hutch 2007, 2).

Whilst there is much within the pleasures of motorcycle riding that relates to what might be seen as the innate joys and exhilarations of movement and travel, such appeals—like other forms of travel—are also culturally constructed and mediated. Haigh and Crowther’s (2005) exploration of the embodied life story narratives of motorcyclists, for example, reveals the error of essentialist assumptions that motorcyclists are ‘risk taking’ personality types. Rather, Haigh and Crowther depict reflexive individuals whose motorcycling identities and practices are culturally mediated and can change through time, which they suggest gives hope to campaigns which seek ‘to focus on competence, wisdom and safety rather than excitement, performance and speed’ (2005, 555). Such work also calls attention to a need to further consider the wider social representations of motorcycle mobility and motorcyclists’ identities, how these have been reflected in academic literature and their consolidation at key nodes within a wider system of moto-mobility, including manufacturer and consumer communities.

Representations of motorcycle mobility and the motorcyclist

This section of the paper foregrounds the “representations of movement that give it shared meaning” (Cresswell, 2010, 19). Representations and images of motorcycling and motorcyclists across time and space are crucial to understanding moto-mobility. Dominant representations can have important material effects, impacting upon the content of government law and regulations, for example. In 1961 provisional licence holders in the UK were restricted to riding 250cc motorcycles partly as a result of negative publicity relating to the activities of

leather clad ‘Rockers’ racing between transport cafes. In this section we explore some key representations of motorcyclists within popular and academic literature. Our central interest is the textual and linguistic portrayal of motorcyclists as a distinctive (and distinctively gendered) subculture, although of course as we will see below such a representation very clearly derives from characteristic depictions across a whole set of visual and other media.

Motorcycle subcultures?

Throughout much of the late twentieth century, Anglo-American representations of the motorcyclist in popular culture were dominated by characterisations of outlaw or rebel bikers (Alt 1982; Maxwell 1998; Phillips 2005). Through films such as *The Wild One* (1954) and *Easy Rider* (1969) as well as a host of 1960s and 1970s B-movies, those who rode motorcycles were allied with delinquency, crime and social threat. The portrayal of the biker as violent degenerate was reiterated within the US popular media (Maxwell 1998; Perlman 2007). As *Time* magazine asked in 1971: “has any means of transport ever suffered a worse drubbing than the motorcycle? In the 17 years since Stanley Kramer put Marlin Brando astride a Triumph in *The Wild One*, big bikes and those who ride them have been made into apocalyptic images of aggression and revolt.” (Hughes, 1971, 1).

In Britain the biker as a key figure of oppositional culture emerged particularly strongly in relation to reportage on clashes between groups of Mods and Rockers in the 1960s (see in particular the analysis in Hebdige 1988). Mods were youth groups whose preference for the modernism of European scooters was one source of their conflict with Rockers, who rode traditionally-styled, predominantly British motorcycles with much larger engines. A view of the biker² as outsider persists within contemporary media representations, particularly in reference to Harley Davidson riders (e.g. “Hog for you baby,” *Guardian Weekend* 1994, excerpted in Lury

1996, 25). Even journalistic accounts which seek to capture changing consumption trends—such as an apparent growth in motorcycle riding amongst middle-aged urbanites—tend to rest upon assumptions about ‘wild’ riders who stand outside the “socioeconomic mainstream” (Maxwell 1998, 274-5; cf. *The Economist* 2001).

Motorcycles and their riders have made very few appearances within academic literatures. Anthropologist Andrew Maxwell (1998, 264) notes, for example, that despite the existence of up to 10 million riders on US roads in the late 1990s, “social scientists have virtually ignored the phenomenon”. For geographers and sociologists, brief glimpses appear almost exclusively in reference either to citations of Hebdige’s (1988) essay on the scooter (e.g. Crang 2005, 177-8; Molotch 2003, 101 and 132) or to Willis’ (1978) ethnography of “the motor-bike boys” (e.g. du Gay et al., 1997, 103; Lury 1996, 17).

Predating the work which is perhaps more well-known in geography, *Learning to labour*, *Profane culture* (Willis 1978) presented an account of “the expressive life of a minority culture” (Willis, 1975, 251) which positioned ‘the biker’ as a distinctive subcultural group. For the members of a motorbike club in a “large English city in 1969,” the motorcycle “was not limited to functional use” but “played its part... in a humanly constructed world of meaning” (Willis 1978, 11, 61). As Slater has argued, work such as Willis’ played an important role in “legitimate[ing] subcultural life by understanding it as sensible practice.” (1997, 164). At the same time, of course, the subcultural label acted precisely to position groups such as male working-class owners of motorcycles as outsider and other.

A number of more recent ethnographies have continued to emphasise the formation of distinctive motorcycle communities (Schouten and McAlexander 1995; Maxwell 1998; Martin et al., 2006; Macdonald-Walker 2000a; see also 2000b). For Schouten and McAlexander (1995),

the subcultural community of American Harley-Davidson riders is constituted through shared consumption practices. Although Schouten and McAlexander point to “a complex social structure of multiple, coexisting subgroups” (1995, 48), their broader representation of Harley riders as a distinctive sub-group which stands apart from ‘mainstream’ society ultimately acts to reinforce the positioning of biker as ‘outsider’. Macdonald-Walker’s focus on riders’ organisations and political activism also acts to stress a relatively singular, oppositional culture: she argues that “the motorcycle lobby has developed largely as a defensive strategy among motorcyclists seeking to nullify attacks on *their community*... (2000a, 200, emphasis added). As McRobbie (2010) has recently argued, the term ‘subculture’ is now often highly abstracted from older analyses in which “subculture really referred to young boys, usually working class, who were making their distance from the mainstream of the culture very visible. They were obviously defiant, even quite delinquent...”. It is now more appropriate to think about groups which “are really much more identifiable in terms of the proliferation of taste cultures, of lifestyle, the expectation that people have to develop a kind of strong passionate attachment to certain forms of leisure” (McRobbie, 2010)

The conjunction of popular representations of the outlaw biker with academic representations of distinctive subcultural groups presents a particular problem in seeking to understand the histories and geographies of motorcycle mobilities more generally. If ‘the biker’ is understood to be working-class, white, male, and self-identifying with a distinctive community, how might we understand, for example the changing use of motorcycles for transport and leisure? Similarly, a straightforward representation of outlaw male bikers makes it difficult to unpack the ways in which masculinities, femininities and gender relations might be bound up with and constructed through motorcycle ownership and use.

Motorcycle masculinities

The association of motorcycle riding with (a dominant heterosexual) masculinity is perhaps one of the most prevalent popular representations of motorcycle consumption and use. Characterisations of the outlaw biker are overwhelmingly male. For many commentators, associations between motorcycle riding and masculinity are seen to be bound up with a specific cross-cutting of gender and class relations, from Martin and Berry's (1974) account of motocross racing and Willis' ethnography of British 'bike-boys' (1975, 1978) through to Halnon and Cohen's (2006, 41) recent assertion that "lower-class (sic) men have sought alternative means of status enhancement" by "mastering a wild, screaming motorcycle." That is, bike riding is interpreted as a means through which working-class masculinity is reinforced.

Rather than viewing motorcycle riding and ownership as a "patently masculine subculture" (Schouten and McAlexander 2006, 54), a number of authors have sought to make visible the participation of women through emphasising—for example—increases in female motorcycle ownership (on the US see Maxwell 1998 and Boslaugh 2006; for Britain McDonald-Walker 2000b). The apparent absence from history of women motorcyclists has been redressed in written and film documentary accounts of their participation in riding, touring and racing (Ferrar 1996; Stone 1994; Joans 2001). Koerner (2007) has suggested that women were seen as an important target market for inter-war British motorcycle manufacturers seeking to expand sales.

Beyond simply the recuperation of women motorcyclists, however, considerably more work is needed to understand the gendering of motorcycle mobilities. As Chambers' (1983, 313) account of the motorcycle as 'leisure good' emphasises, motorcycle masculinities cannot straightforwardly be assumed but rather are culturally constructed and maintained:

there is nothing intrinsic in the object that is, for example, virile. Speed and danger are facts, excitement is emotion and virility, aggression and defiance are analogies of these facts, ideologically framed. [Dominant characterisations of motorcyclists express] the excitement of possession and the experience of riding; the outdoor mobile life of the free wanderer.”

That is, a range of prevailing representations associated with motorcycles and motorcyclists often act to script and re-inscript stereotypical gender divisions. The apparent physicality involved in riding a motorbike is seen to demand masculine modes of bodily comportment (Young 1990). In a similar manner to automotive travel, representations of motorcycle touring also are strongly aligned with an “unattached male heterosexuality (as per Cresswell 1993, 258). Not least, the motorcycle is often characterised as “symbolic object of pleasure and power” (Chambers, 1983, 312)

Hebdige’s (1988, 84ff) account of the (feminised) scooter as “sexed object” might provide one route to understanding the positioning of the motorcycle as its (masculine) opposite, particularly in his examination of transformations in meaning through design, production, advertising and use. However it is ultimately insufficient to read motorcycle masculinities solely through the conflict between British Mods and Rockers, particularly given the way in which Hebdige’s work has been interpreted by other commentators. Commonly, secondary accounts rehearse a distinction between the “refined and aestheticised masculinity” of Mods and the “more traditional one of the motorcyclist Rockers” (Sassatelli, 2007, 78); or between the “macho masculinity of the Rockers” and the Mods’ “identification with foreign sophistication, discerning consumerism, youthful modernity, and a different form of masculinity” (Crang, 2005, 178). Motorcyclists=Rockers=bikers, therefore, are aligned solely with a seemingly traditional and singular masculinity.³

Persistent representations and understandings of motorcycle mobility can be seen to have been consolidated through a range of media, including literature, film and other forms of popular culture. Such representations have informed and perhaps even have been informed by understanding of motorcyclists as belonging to distinctive subcultural worlds. In contrast, we would argue that it is much more helpful to conceptualise motorcycle riding and consumption within a much wider frame. As Hebdige (1988, 212) has suggested in relation to shifts in forms of popular music production and consumption, “it no longer appears adequate to confine the appeal of these forms—the multiple lines of effect/affect emanating from them—to the ghetto of discrete, numerically small subcultures. For they permeate and help to organise a much broader, less bounded territory where cultures, subjectivities, identities impinge upon each other.”

In the following section, we turn to look at a somewhat different set of moments through which understandings of the motorcycle and the motorcyclist have been shaped and reshaped, highlighting examples of developments in manufacturing and production. Increasingly cognisant of the “broader, less bounded territory” identified above, manufacturers have become more sensitive to the existence of a range of different motorcycle worlds. Hebdige has argued, for example, that in the post-war period, “the duty of [scooter] manufacturers to the market was to extend far beyond the mere maintenance of production standards, the meeting of delivery dates. Now they were to preside over the creation of new forms of social identity and leisure, a new consumer relation to the ‘look of things’” (1988, 95). We extend these themes further below, drawing in particular upon the notion of the ‘economy of qualities’ (Callon *et al.* 2002).

The economy of motorcycle qualities

Existing work on systems of automobility has tended to foreground cultures of car consumption and use, focusing attention upon, for example, the car-driver assemblage (Thrift

2004) or the cultural logic of the car as consumer object (Gartman 2004). By implication, nodes of production—such as design and manufacture—remain relatively unspecified. Certainly, a component of automobility is seen to be “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” (Urry, 2004, 25-6, emphasis in original). However there are as yet few accounts which give detailed consideration to the ways in which nodes of manufacture, design and marketing, for example, are woven through systems of automobility. Below, we seek to reinsert these aspects of production into the story in order to arrive at a more rounded understanding of moto-mobility. As Urry has suggested in a recent interview, “quite a lot of people writing about mobile lives have written without regard to either questions of governance or the economic bases of the different kinds of industries and organisations that constitute it (Adey and Bissell, 2010, 3).

Available accounts of the motorcycle industry in advanced industrial economies have tended to contrast the fortunes of motorcycle industries in a range of key countries—typically Britain, Italy and Japan. The post-war British motorcycle industry is characterised as an exemplar of failed Fordism, having been unable to respond to the more successful mass production of motorbikes by Japanese firms such as Honda, Yamaha, Kawasaki and Suzuki who were able to capitalise upon superior engineering and technological expertise (Cenzatti 1990; Kosnik *et al.* 1998; Cherng and Kosnik 2003). Italian manufacturers not only were at the forefront of the successful mass production of scooters from the 1950s onwards, but also specialist firms in Central Italy developed the profitable production of larger motorcycles (Cenzatti, 1990). Narratives which emphasise the national distinctiveness of industrial production—and the relative ‘success’ and ‘failure’ of different national motorcycle industries—

clearly run through both academic and more popular accounts (Koerner 1998; Cenzatti 1990; Hopwood 1981; Walker 2000; Brown 2005).

An additional strand of work pays attention to the location of motorcycle industries in relation to broader conceptualisations of the clustering of economic activity. Notably, the Bologna (the home of Ducati) motorcycle production cluster frequently is cited as an exemplary industrial district (Cooke 1996; Bardi and Garibaldo, 2001; Boari and Lipparini 1999; Boari 2001; Powell and Grodal 2005; Mariotti 2007). Motorcycle production also has been considered within work on innovation and the development of innovative capacity, although the choice of the motorcycle industry as a case study often appears incidental to the analysis (e.g. Wezel 2005; Yamamura *et al.* 2005; Lipparini, Lorenzoni and Zollo, 2001; Muffatto and Panizzolo 1996). In Corso *et al.*'s investigation of automotive, motorcycle and earthmoving equipment manufacture, for example, case study examples which "share the same base technology" were selected to "set up good *ceteris paribus* conditions" for the isolation of "industry specific factors" influencing product innovation (1999, 156).

Rather than continuing with the largely productionist vein of existing work, an approach is needed which can address the motorcycle's positioning within wider socio-cultural systems. Particularly helpful in this regard is Callon *et al.*'s (2002) contention that in mature markets marked by differentiation and diversification, the success of producers is crucially linked to their ability to influence the 'qualification' of products and to strategically position their goods *vis a vis* those of their competitors. This involves understanding how diverse networks of agents and sets of reflexive and dynamic processes (stretching beyond the firm through design, production, distribution and consumption) are involved in establishing the 'qualities of products'. The broader social collectivities and communities of which consumers are part are central to how

consumers qualify and requalify products in ways beyond simple cost and price. Moreover, consumers become active participants in this economy of qualities:

There is no reason to believe that agents on the supply side are capable of imposing on consumers both their perception of qualities and the way they grade those qualities. Interactions involving complex and reciprocal influences...are the rule rather than the exception (Callon *et al*, 2002, p.201).

Competitive advantage lies when consumers are attached to the singularity of a firm's product to meeting their needs, whilst detachment to comparable or substitute products is a constant risk.

Such insights are helpful in understanding the recent success of European manufacturers of high-value, niche-marketed and positioned motorcycles such as Triumph, BMW and Ducati. Innovative European manufacturers are in effect not simply selling motorcycles, but rather what has been termed *integrated motorcycle systems*; stretching to accessories, clothing, technical and customer support (including finance, insurance and recovery services), festival events, touring and training services. These integrated elements are crucial to establishing brand identities and loyalties and shaping the lifestyle worlds enabled by such purchases. As the Commercial Director of Triumph Motorcycles has suggested:

“We have many competitors—not only motorcycle manufactures, but also other lifestyle brands. Because today you don't really need a motorcycle—it's a product you buy to enhance your lifestyle, as much of a leisure item as boat or skis... I want them [the non-motorcycling public] to recognise the brand, so the guys who actually ride the bikes can feel good about what they're doing” (Tue Mantoni, cited in Cathcart 2005.)

Alongside the close relationships manufactures nurture with important market intermediaries (such as the motorcycle press, through exclusive 'first pictures', access to and road testing of new products), integrated services are key elements in the broader commodity 'qualification' process.

We can see much of this qualification process at work by examining the BMW R1200GS and R1200GS Adventure models. This motorcycle sold 2,277 units in the UK in 2006, making it

the country's best selling motorcycle and underpinning BMW's sales growth across Europe. The qualification of the GS model has evolved over 25 years since the introduction of the (now frequently referred to as 'iconic') R80 GS in 1980. Much of the GS' success can be attributed to the technical reliability and innovative features of the model's design. However from the GS' inception, processes of refinement and testing would appear to characterise it as a product of co-creation. Within the ever growing consumer community of 'round-the-world' motorcycle travellers the GS has become the *de rigueur* model of choice. The 'GS' label directly recognises this, standing for 'Gelände/Straße' (off-road/ on-road). As Thrift has argued:

When a commodity produces a sufficiently compelling experience environment, *consumer communities* will evolve beyond a company's control, thus directly co-creating value and providing the firm with a new terrain of profit – generalized outsourcing – if it is nimble enough to adapt to new conditions. (2006, 290, emphasis in original).

“User centred innovation” (*ibid.*) of the GS for long distance travel purposes has not only spawned a small industry in itself (with independent companies such as Touratech and Wunderlich specializing in modifying and providing specialised accessories for the GS for 'round-the-world' journeys), but also BMW have increasingly incorporated such modifications directly into new models, notably the more recent R1200 GS 'Adventure'. As Bettoil and Micelli have suggested in the case of Ducati, firms derive considerable benefit from developing a “close and intensely communicative relationship with the more sophisticated and aware sections of motorcycle consumers” (2006, 8; see also the Ducati case study in Sawhney *et al.*, 2005).

Alongside the incorporation of technical innovations directly spearheaded by consumers, BMW increasingly have recognised that the success of the GS is fundamentally linked to the firm's ability to capture and configure the worlds and social collectivities into which the bike is inserted. BMW have been adept in aligning themselves with the community of 'round-the-

world' motorcycle travellers mentioned above, which owes much of their origins to the pioneering journey of Ted Simon (1979).⁴ This round-the-world community has grown significantly, with many books and internet sites recalling experiences and offering advice to potential travellers. BMW has done much to consolidate its status (and therefore sales) within this community. Across Europe the firm has established a series of 'off-road training' and adventure centres which teach the skills necessary for what has increasingly been branded as 'adventure travel'—such as a UK site in the Welsh Brecon Beacons. Moreover, the parent company as well as UK BMW dealerships have regularly sponsored individuals on such journeys. The most recent and high-profile example occurred in 2005, when BMW supplied machines, branded clothing and training to the film actors Ewan McGregor and Charlie Boorman for their *Long Way Round* journey. The book and television series that resulted from this journey generated enormous publicity and advertising for BMW and underpinned a huge rise in sales—referred to by BMW dealers as the *Long Way Round* effect.

The economy of qualities approach helps to reconfigure conventional thinking and focus in a number of ways. First, like the concept of commodity chains and networks (Jackson et al. 2006; Hughes and Reimer 2004) the notion of 'qualification' makes conceptual linkages across traditionally separate categories of production and consumption. As we have indicated, the qualities of products can be established by a wide range of intermediary agents and institutions (e.g. marketers, advertisers, consumer magazines, and industry and product commentators). Moreover, producers increasingly seek the ideas of consumers, who in turn are often keen to provide inputs to improve the quality of products.

Second, as the knowledges of consumer communities are increasingly drawn into production networks, so traditional understandings about the locations of innovation and design,

for example, are stretched beyond individual producers to encompass not only networks of firms, but also forms of co-creation with consumers and consumer networks. Third, the nature and character of innovation itself is re-evaluated. Producers are involved in "...a reworking of what is meant by the commodity from simply the invention of new commodities to the capture or configuration of new worlds into which these commodities are inserted" (Thrift, 2006, 288, emphasis in original). Thus design and innovation are shifted into realms beyond the commodity itself, to the invention and marketing of brand identities (Lury, 2004; Arvidsson, 2005), the spaces where these identities and emotive worlds are communicated, and the actual lifestyles which commodities help construct and obtain.

Conclusion

In this paper we have drawn upon the broad conceptual frame of work on systems of automobility in order to enhance understandings of a distinctive object, experience and form of movement: moto-mobility. In an examination of the 'motorcycle-rider' we have sought to explicate important relationships which can emerge between motorcycle and car users and have reflected upon the potentially differently-constructed embodied experiences of pleasure, leisure and more everyday motorcycle use. Much further work is invited by this kind of focus. For example, the pleasures and sensual aspects of the motorcycle also extend to the ways in which it is watched and listened to as a motor sport, ranging from local leisure pursuits to globally branded sporting championships, such as *MotoGP* and *SBK World Superbike Championship*. Moto-mobilities research should also be of practical use. The relationship between motorcycle and PTW use and strategies to reduce urban congestion will be an interesting one. Relatively small vehicles enable greater freedom of movement and potentially could help reduce congestion and the need for large parking infrastructures. However, in many of the larger metropolitan

centres of China and some other Asian/Pacific countries motorcycle and PTW use has been restricted, predominantly due to the polluting effects of inefficient two-stroke engines. Moreover, in any context powered two wheel travel is hazardous. In 2006 such forms of transport accounted for 6,812 road accident fatalities in Europe, 28,545 in India and 23,779 across Japan, Indonesia, Malaysia, Philippines, Singapore and Thailand (IMMA, 2010). The moto-mobility project should contribute to reducing such casualty figures through better understanding rider and driver behaviours, infrastructure designs and training programmes (see, for example, IMMA, 2010).

The paper also highlights representational narratives of mobility. We suggested that existing work—and particularly that which emphasises motorcycle subcultures—has been highly limited in its relatively one-dimensional presentation of motorcycle riders as forming part of distinctive communities standing at the socioeconomic margins of Northern industrial economies. At one level our own account of the riders of the BMW GS motorcycle might in part be viewed as continuing a traditional focus on the motorcyclist as a sub-cultural phenomena, all be it a more contemporary and less intimidating social group. However, our analysis also sought to extend insight into new areas of research, such as the strategies and techniques of motorcycle production and marketing.

Many aspects of motorcycle production, consumption, marketing, design and use remain decidedly understudied. We argued that the notion of the economy of qualities may provide some important insights in understanding systems of auto (and in turn moto-) mobility. Attempts by manufacturers to understand and reconfigure consumer demands and identities are not necessarily entirely new: we might cite, for example, the 1960s, North American and European success of Honda's Super Cub backed by the advertising campaign "You meet the nicest people

on a Honda". And as Hebdige's (1988) work has shown, mobilisation of networks of relationship between producer and consumer was central to both the domestic and the global success of the Italian scooter (see also Arvidsson 2001). We would argue that attending to the economy of motorcycle qualities moves discussions forward in two ways. At one level it provides an important extension to more economically-inflected readings of, for example, clustering or innovation, which have tended not to examine practices much beyond spaces of production. Most importantly, however, the notion of the economy of qualities opens up the possibility of stretching analyses beyond the phenomenology of the moving self—implicit in a focus on the car-driver and in accounts of individual mobilities—to fully understand wider interconnected systems of automobility.

Finally, we would suggest that there is significant future work to be done in exploring the important issue of socio-spatial variations in systems of auto- and moto-mobility—an issue which we have only just begun to address in the paper. In the case of the motorcycle and other powered two-wheelers, global sales are projected to increase to over 114 million units by 2013 (some 90% of which are also likely to be manufactured across Asia) (Freedonia, 2009). Cultural representations of the moto-mobility experience in developing countries are particularly absent. This might involve documenting different sets of rider experience; more mainstream unglamorous daily movement on poorer roads, on smaller often overloaded vehicles, in polluted, dangerous and congested environments. However, with increasing affluence and leisure time for at least some social groups it will also perhaps be drawn to the character of motorcycle sub-cultures in such developing world contexts (see, for example, Drummond 2000, on late-night motorcycle races in Hanoi). Whatever the focus, it is vital for conceptualisations of automobility—which to date have been overwhelmingly preoccupied with how people move

around in mature Western economies (although see Edensor, 2004)—to fully appreciate this growth, especially if we are to speak meaningfully about geographical variations in systems of automobility.

¹ We predominantly refer to motorcycles through the paper, but at the same time recognize a variety of forms of motorized two wheel transport, stretching from small mopeds and scooters to larger engine motorcycles. Clearly, there may be significant diversity across the riding experiences and social constructions and meanings of different types of PTWs, and we identify such distinctions where necessary.

² It is important to clarify the use of the epithet ‘biker’. A good proportion of motorcycle riders who do not belong to self-defined ‘outlaw’ gangs would refuse the ‘biker’ label in favour of ‘motorcyclist’. Similarly, the majority of the available social science literature (Maxwell, Alt, Thompson, 2000; Halnon and Cohen 2006) refers to the latter term. One exception is McDonald-Walker (2000), whose book *Bikers: culture, politics and power* carries a cover illustration of a leather-clad motorcyclist whose face is obscured by a scarf, and around whose neck hangs a heavy security chain. The choice of cover image may well have lain in the hands of the publisher, although McDonald-Walker does refer to ‘bikers’ through much of the text.

³ Towards the end of his essay, Hebdige (1988, 114) notes that women’s participation within Mod subculture predominantly was as a subordinate role of “girlfriend” positioned as ‘pillion fodder’. Thus the characterisation of Mods as a “challenge to hegemonic forms of masculinity (Sassatelli 2007, 78) appears somewhat misleading.

⁴ It is worth noting that whilst Simon’s original journey was completed on a Triumph, he used a BMW R80 GS for his recent re-run of this journey, as detailed in *Dreaming of Jupiter* (2007).

References

- Adey, P and D Bissell, 2010 Mobilities, meetings and futures: an interview with John Urry *Environment and Planning D: Society and Space* 28(1) pp. 1 – 16
- Alt, J (1982) Popular culture and mass consumption: the motorcycle as cultural commodity *Journal of Popular Culture* XV 129-141.
- Arvidsson, A (2001) From counterculture to consumer culture *Journal of Consumer Culture* 1(1) 47-71.
- Arvidsson, A (2005) Brands: a critical perspective *Journal of Consumer Culture* 5(2) 235-258
- Bardi, A and F Garibaldi (2001) The economic and social impact of mergers and acquisitions in local productive systems: the automotive cluster in the Emilia-Romagna region Fondazione IPL, Bologna, *9th GERPISA International Colloquium*, Palais du Luxembourg, Paris, 7-8-9 June. <http://www.univ-evry.fr/labos/gerpisa/>; accessed 10/03/07.
- Beckmann, J (2001) Automobility—a social problem and theoretical concept *Environment and Planning D: Society and Space* 19: pp. 593-607.
- Berger, J (1992) *Keeping a rendezvous* (London: Granta)

- Bettoil, M and S Micelli (2006) The strategic role of design for the competitiveness of the Italian industrial system Paper presented at the Global Value Chains Workshop “Industrial Upgrading, Offshore Production, and Labor”, Center on Global Governance and Competitiveness, Duke University, November 9-10, 2006
<http://www.cggc.duke.edu/gvcworkshop.html>; accessed 10/03/07
- Binnie, J, T Edensor, J Holloway, S Millington and C Young, 2007 Editorial: Mundane mobilities, banal travels *Social and Cultural Geography* 8 165-174.
- Boari, C (2001) Industrial clusters, focal firms and economic dynamism: a perspective from Italy Washington, World Bank Institute
<http://siteresources.worldbank.org/WBI/Resources/>; accessed 9/03/07
- Boari, C and A Lipparini (1999) Networks within industrial districts: organising knowledge creation and transfer by means of moderate hierarchies *Journal of Management and Governance* 3 339-360.
- Borden, I (2001) *Skateboarding, Space and the City: Architecture and the Body* (Oxford: Berg)
- Boslaugh, S (2006) Getting past the stereotypes: women and motorcycles in recent lesbian novels *International Journal of Motorcycle Studies* March. 7 pp. Available online at:
<http://ijms.nova.edu/index.html>
- Brown, R (2005) *History of the motorbike* Bath, Parragon.
- Bull, M (2004) Automobility and the power of sound *Theory, Culture and Society* 21 243-259.
- Callon, M, C Méadel and V Rabeharisoa (2002) The economy of qualities, *Economy and Society*, 31 (2), pp. 194-217
- Cathcart, A (2005) Triumph: and how to beat the Big Four with a Three *Motorcycle Sport and Leisure* No. 541, November, pp. 64-68.
- Cenzatti, M (1990) Restructuring in the motorcycle industry in Great Britain and Italy until 1980 *Environment and Planning D: Society and Space* 8: 339-355.
- Chambers, D A (1983) Symbolic equipment and the objects of leisure images. *Leisure Studies* 2 301-315
- Cherng, E and T Kosnik (2003) The global motorcycle industry – 2003 Stanford Technology Ventures Programme, STVP-2003-003.
<http://edcorner.stanford.edu/authorMaterialInfo.html?mid=472&author=28> (accessed 08/03/11)
- Cooke, P (1996) The new wave of regional innovation networks: analysis, characteristics and strategy *Small Business Economics*, 8: 159-71.
- Corso, M, M Muffato and R Verganti (1999) Reusability and multi-product development policies: a comparison of approaches in the automotive, motorcycle and earthmoving machinery industries *Robotics and Computer-Integrated Manufacturing* 15: 155-165.
- Crang, P (2005) The geographies of material culture,” in P Cloke, P Crang and M Goodwin, (Eds.), *Introducing human geographies* Second edition , pp. 168-181 (London: Hodder Arnold).
- Cresswell, T (1993) Mobility as resistance: a geographical reading of Kerouac’s ‘On the road’ *Transactions, Institute of British Geographers* 18 249-262.
- Cresswell, T (2010) Towards a politics of mobility *Environment and Planning D: Society and Space* 28 17-31.
- Dant, T (2004) The driver-car *Theory, Culture and Society* 21 61-79.
- Department of Transport (2009) *Transport statistics bulletin: compendium of motorcycle statistics* Available at:

- <http://www.dft.gov.uk/adobepdf/162469/221412/221552/228173/517838/motorcyclingstats2009.pdf> (accessed 24/09/10)
- Drummond, L (2000) Street scenes: practices of public and private space in urban Vietnam *Urban Studies* 37 2377-2391
- du Gay, P, S Hall, L Jaynes, H Mackay and K Negus (1997) *Doing cultural studies: the story of the Sony Walkman* (London, Sage)
- The Economist* (2001) Paunch power 22 November 2001.
- Edensor, T (2004) Automobility and national identity: representation, geography and driving practice *Theory, Culture and Society* 21 101-120.
- Edensor, T (2007) Mundane mobilities, performances and spaces of tourism *Social and Cultural Geography* 8 199-215.
- Edensor T and Richards S (2007) 'Snowboarders vs. skiers: contested choreographies of the slopes' *Leisure Studies* 26 97-114.
- Featherstone M 2004 Automobilities: an introduction *Theory, Culture & Society* 21 1-24
- Ferrar, A (1996) *Hear me roar: women, motorcycles and the rapture of the road* New York, Crown.
- Fincham, B. (2006) Bicycle messengers and the road to freedom *The Sociological Review* 54, pp. 208-222
- Fincham, B. (2007) 'Bicycle Messengers: Image, Identity and Culture' in D. Horton P. Rosen and P. Cox (Eds) *Cycling and Society* (Aldershot: Ashgate), pp. 179-195.
- Freedonia (2009) World Motorcycles Market (including-Electric Bikes & Mopeds <http://www.reportlinker.com/p0148003/World-Motorcycles-Market-including-Electric-Bikes-Mopeds.html> (accessed 7/03/11)
- Gartman, D (2004) Three ages of the automobile: the cultural logics of the car *Theory, Culture and Society* 21 169-195.
- Garvey, P (2001) Driving, drinking and daring in Norway," in D Miller, (ed.), *Car cultures*, pp. 133-152 (Oxford, Berg)
- Guevara, E (2003) *The motorcycle diaries* Trans. Aleida March London, Harper Perennial
- Hannam, K, M Sheller and J Urry (2006) Editorial: Mobilities, immobilities and moorings *Mobilities* 1 1-22.
- Haigh, J and G Crowther (2005) Interpreting motorcycling through its embodiment in life story narratives *Journal of Marketing Management* 21 555-572.
- Halnon, KB and S Cohen (2006) Muscles, motorcycles and tattoos: gentrification in a new frontier *Journal of Consumer Culture* 6 33-56
- Hebdige, D (1979) *Subculture: the meaning of style* (London: Routledge)
- Hebdige, D (1988) *Hiding in the light* (London: Comedia)
- Hopwood, B (1981) *Whatever happened to the British motorcycle industry?* (Yeovil: Haynes)
- Hughes, A, and S Reimer (2004) *Geographies of commodity chains* (London: Routledge)
- Hughes, R (1971) Myth of the motorcycle hog *Time*, 8 February 1971
- Hutch, R (2007) Speed masters throttle up: space, time and the sacred journeys of recreational motorcyclists *International Journal of Motorcycle Studies* July. Available online at: <http://ijms.nova.edu/index.html>
- International Motorcycle Manufacturers Association (IMMA) (2010) 'Motorcycle Safety: IMMA's contribution to the Decade of Action for Road Safety 2011-20' http://www.jama-english.jp/release/release/2010/IMMA_HHRT2011-20.pdf (accessed 7/03/11)

- Jackson, P, N Ward, and P Russell (2006) Mobilising the commodity chain concept in the politics of food and farming *Journal of Rural Studies* 22 (2):129-141.
- Japanese Automobile Manufacturing Association (JAMA) 2006, Press release, September 2006.
- Joans, B (2001) *Bike lust: Harleys, women and American society* (Madison: University of Wisconsin Press)
- Jones, Phil 2005 Performing the city: a body and a bicycle take on Birmingham, UK *Social & Cultural Geography* 6 813 – 830.
- Koerner, S (1998) Four wheels good; two wheels bad: the motorcycle versus the light motor car—1919-39, in D Thoms, L Holden and T Claydon, (Eds.) *The motor car and popular culture in the 20th century* (Aldershot: Ashgate), pp. 151-176.
- Koerner, S (2007) What ever happened to the girl on the motorbike? British women and motorcycling 1919-1939 *International Journal of Motorcycle Studies*, March. 9 pp. Available online at: <http://ijms.nova.edu/index.html>
- Koshar, R (2004) Cars and nations: Anglo-German perspectives on automobility between the World Wars *Theory, Culture and Society* 21 121-144.
- Kosnik, T (with D Pasmij, D Sander Waggener and B Wu) (1998) Note on the Global Motorcycle Industry - 1995 Stanford Technology Venture Program Case STVP1998-002 Available at: <http://edcorner.stanford.edu/authorMaterialInfo.html?mid=104&author=28>
- Latour, B (1992) Where are the missing masses? The sociology of a few mundane artefacts, in W Bijker, T Hughes and T Pinch, (Eds.), *The social construction of technical systems* (Cambridge, MA: MIT Press), pp. 225-258.
- Latour, B (1993) *We have never been modern* (Cambridge MA: Harvard University Press)
- Lawrence, T E (1955) *The mint: a day-book of the RAF Depot between August and December 1922* (London: Jonathan Cape)
- Lipparini, A Lorenzoni, G and Zollo, M 2001 Dual network strategies: managing knowledge-based and efficiency-based networks in the Italian motorcycle industry. Working Paper.
- Lury, C (2004) *Brands: the logos of the global economy* (Routledge: London)
- Lury, C (1996) *Consumer culture* (Cambridge: Polity)
- McDonald-Walker, S (2000) Driven to action: the British motorcycle lobby in the 1990s *The Sociological Review* 186-202
- McDonald-Walker, S (2000) *Bikers: culture, politics and power* (Oxford: Berg)
- McRobbie, Angela (2010) Contribution to Laurie Taylor's *Thinking allowed*, BBC Radio 4. Originally broadcast 5 July 2010
- Mariotti, F (2007) Learning to share knowledge in the Italian motorsport industry *Knowledge and Process Management* 14 81-94
- Martin, D M, J W Schouten and J H McAlexander (2006) Claiming the throttle: multiple femininities in a hyper-masculine subculture *Consumption, Markets and Culture* 9 171-205.
- Martin, T W and Berry, K (1974) Competitive sport in post-industrial society: the case of the motocross racer *Journal of Popular Culture* viii 107-120.
- Maxwell, A (1998) Motorcyclists and community in post-industrialist urban America *Urban Anthropology* 27 263-299.
- Merriman, P (2004) Driving places: Mark Augé, non-places and the geographies of England's M1 motorway *Theory, Culture and Society* 21 145-167.
- Miller, D, ed. (2001) *Car cultures* (Oxford: Berg)
- Molotch, H (2003) *Where stuff comes from* (London: Routledge)

- Muffatto, M and R Panizzolo (1996) Innovation and product development strategies in the Italian motorcycle industry *Journal of Product Innovation Management* 13 348-361.
- Oxley, M (2007) Surfing the urban cut and thrust *Bike* Issue 414, October, pp. 115-116.
- Perlman, A (2007) The brief ride of the biker movie *International Journal of Motorcycle Studies* March. Available online at: <http://ijms.nova.edu/index.html>
- Pirsig, R (2000 [1974]) *Zen and the art of motorcycle maintenance* New York, Harper Perennial
- Powell, W and Grodal S 2005. "Networks of innovators," in J. Fagerberg, D. Mowery and R. Nelson, editors, *The Oxford handbook of innovation* Oxford, OUP, pp. 56-85.
- Sassatelli, R (2007) *Consumer culture: history, theory and politics* (London: Sage)
- Sawhney, M, G Verona and E Prandelli (2005) Collaborating to create: the internet as a platform for customer engagement in product innovation *Journal of Interactive Marketing* 19 4-17
- Schouten, J and McAlexander J (1995) Subcultures of consumption: an ethnography of the new bikers *Journal of Consumer Research* 22 43-61.
- Sheller, M (2004) Automotive emotions: feeling the car *Theory, Culture and Society* 21 221-242.
- Sheller, M (2007) Bodies, cybercars and the mundane incorporation of automated mobilities *Social and Cultural Geography* 8 175-197.
- Sheller, M and Urry J (2000) The city and the car *International Journal of Urban and Regional Research* 24 737-757.
- Sheller, M and J Urry (2006) The new mobilities paradigm *Environment and Planning A* 38 207-226
- Simon, T (1979) *Jupiter's travels* (Harmondsworth: Penguin)
- Slater, D (1977) *Consumer culture and modernity* (Cambridge: Polity)
- Spinney J (2006) A place of sense: a kinaesthetic ethnography of cyclists on Mont Ventoux *Environment and Planning D: Society and Space* 24: 709-732
- Stone, A (1994) *She lives to ride* ITVS/PBS, 75 min
- Taylor, M and J Márquez (2000) Cycles of paradox, in M Drutt, editor, *The art of the motorcycle*
- Theory, Culture and Society* (2004) Special issue on Automobilities 21 (4-5)
- Thrift, N (1996) *Spatial formations* (London: Sage)
- Thrift, N (2003) Performance and ... *Environment and Planning A* 35, 2019-24.
- Thrift N (2004) Intensities of feeling: towards a spatial politics of affect *Geografiska Annaler, Series B: Human Geography* 86 57-78.
- Thrift, N (2006) Re-inventing invention: new tendencies in capitalist commodification, *Economy and Society*, 35, 2, 279-306
- Thrift, N (2004) Driving in the city *Theory, Culture and Society* 21 41-59.
- Urry, J (2000) *Sociology Beyond Societies*. (London: Routledge)
- Urry, J (2004) The 'system' of automobility *Theory, Culture and Society* 21 25-39.
- Walker, M (2000) *History of motorcycles* (London: Hamlyn)
- Wezel, FC (2005) Location dependence and industry evolution: founding rates in the United Kingdom motorcycle industry, 1895-1993 *Organization Studies* 26 729-754.
- Willis, P (1973) The expressive style of a motor-bike culture, in J Benthall and T Polhemus, (Eds.), *The body as a medium of expression* (London: Allen Lane), pp. 233-252.
- Willis, P (1978) *Profane culture* (London: Routledge and Kegan Paul)
- Wylie, J (2007) *Landscape* (London: Routledge)

- Yamamura, E, T Sonobe and K Otsuka (2005) Time path in innovation, imitation and growth: the case of the motorcycle industry in postwar Japan *Journal of Evolutionary Economics* 15 169-186.
- Young, IM (1990) Throwing like a girl: a phenomenology of feminine bodily comportment, motility and spatiality, in *Throwing like a girl and other essays in feminist philosophy and social theory* (Bloomington, University of Indiana Press)