

## Histories

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Mobility studies are often defined in terms of their primary focus on the practices and experiences of being a mobile subject. In this sense John Urry (2000, 2007) has so eloquently argued for mobilities as a paradigmatic way to address social relations and subjectivities within present day societies made in and through mechanised mobility and telecommunications systems. Yet, theorising the historical specificity of mobile experience remains problematic for a mobility studies shaped substantially by recent experiences of mechanised mobility, networked and broadcast telecommunications. Much innovative work in mobilities studies has, for example been in the field of mobile methodologies which challenge conventional approaches to meaningful experience as consciously symbolically structured or open to textual forms of analysis. Drawing on qualitative, participatory and multi-media data collection such techniques provide novel means of accessing the flux and flow of mobile experience (Hein et al 2008; Fincham et al 2010, Revill 2010). Yet such methods cannot simply be adapted to historical situations where we do not have direct access to the immediate responses of past actors, very frequently all that remains available to mobility historians are the apparently mute buildings, structures and machines of transport archaeology and second hand accounts in print and visual media. Neither do such methods enable us to readily locate specific mobilities historically and geographically within broader systems of socially situated meaningful experience. However, since the criticisms of travelling theory by Cresswell and others in the late 1990s many have recognised the importance of locating the experience of mobility geographically and historically if mobilities are to be recognised as producers of difference, differential experiences and uneven socio-material relationalities (Wolff 1992, Cresswell 2001a, 2006, 2010, 2011, Cresswell and Verstrate 2002; also Adey 2006). Such processes of location necessarily implicate infrastructures, equipment and technologies equally along with practices, knowledges and social relations in the shaping of mobile experience.

This chapter argues that a prerequisite for recognising the historical specificity of mobile experiences has to begin with a theorisation of the role of infrastructure as an integral part of that experience. It argues in this regard it may be useful for mobility studies to embrace current re-workings of communications theory within the philosophy of technology figured

as post, critical or cultural phenomenologies. Thought of in terms of communication theory, the experience of mobility is simultaneously one which is to a degree given shape by the infrastructures, technologies and equipment which provide media by which we come to know parts of the world in particular ways. At the same time the embodied actions and activities of movement are themselves active practices which draw on such media in the processes of sensing and making sense of self and world. The chapter concludes by discussion some of the implications of this for studying the experience of mobility as historically situated.

### **Mobility infrastructure, situating the experience of mobility**

Infrastructures sometimes seem to form an apparently passive background to human practices lived in the moment, whilst at other times they form the focus of attention and attachment located in reflexive historical senses of meaning, culture, belonging and identity.

Infrastructures are often obdurate and deeply embedded in social and material life at the same time our encounters with them are frequently experienced as either transitory, just in passing as we move through the ticket barrier or take the phone call; or, superficial to the extent that our attention lies beyond the technology itself on the task or action it enables or facilitates.

Infrastructures often appear almost transparent; they run unnoticed in the background until system failure brings us up sharp with their existence and our dependence on them (Law 2003). In a present day context, for example Bissell (2009a, 2009b, 2009c) adopts the infrastructures of rail travel as a container or context in which to explore aspects of embodied experience such as boredom and temporality, whilst Adey (2004, 2008) shows how passenger experience is actively shaped and indeed manipulated by airport designers and operators.

However, the technologies and infrastructures of mobility also have a distinctive and sometimes high profile and iconic presence in popular imaginations and public histories.

From this position for instance the authors in Miller (2001) examine the highly racialised, gendered and status bound experiences of owning and driving automobiles as these have developed through the 20<sup>th</sup> century. Transport infrastructures and related iconic machinery continue to play highly charged and richly layered symbolic roles in histories of modernity, imaginings of nation building, social, economic and cultural progress and narratives of individual self fulfilment (for example Bishop 2002, 2008; Divall and Scott 2001; Divall and Revill 2005; Divall and Shin 2011; Merriman 2004, 2005a, 2007; Revill 2012).

Histories of specific technologies can certainly help begin to unpack such complex ramifications, associations and implications, but it is only too easy to overdraw the impact of any particular technology or piece of equipment. The theoretical resources available to mobility studies do not necessarily provide readymade frameworks which address infrastructure and equipment as active participants in the making of historically situated mobile experience. Notions of anchoring and mooring developed by Urry and others are helpful to the extent that they suggest both contingency and exchange (Hannam et al 2006). Yet the clear separation between that which is mobile and that which is static and the dependency of that which is mobile and moored on an anchoring fixity suggested by these terms may be less rather than more helpful if infrastructures are to be understood as co-constructive of the experience of mobilities. This may be particularly a problem if accounts of mobility are to address the ways in which the experience of mobility is shaped by engagement with specific systems, practices and technologies of mobility located within particular histories and geographies. The idea of mobility regimes is derived partly from the Foucauldian conception of 'regimes of practice'. It provides a useful way of conceptualising the subjective experience of mobility given form within broader systems and practices which include infrastructures broadly defined as equipment, technologies, physical structures, legal systems, techniques of monitoring and surveillance. The concept of regime seems most useful as a means of engaging mobilities infrastructures in the context of mobility systems which are significantly defined by processes and practices of regulation (Shamir 2005; Verstraete 2010). A focus on historical mobility regimes may be useful for understanding the disciplining of mobile bodies as drivers, passengers and pedestrians (Merriman 2005, 2007), or indeed rivers, sailors and cargoes (Revill 2007), yet it does not necessarily provide sufficient scope to address the creative and expressive dimensions of mobile experience. In this context Cresswell (2010:18) has characterised mobility as 'a fragile entanglement of physical movement, representations, and practices'. For Cresswell such 'constellations of mobility' are formed from three elements, in turn these are: particular patterns of movement, representations of movement and ways of practicing movement. In concert they constitute entities or systems which 'make sense together'. In this way Cresswell seeks to bring together the apparently disparate components of mobility as meaningful experience, drawing together sensitivity to the affective experience of movement with a critical politics of cultural representations.

Cresswell's formulation has proved effective and appropriate in a variety of historical contexts (see 2001a, 2006). However because his formulation is centred on the mobile subject and deals with infrastructures, technologies and equipment only to the extent that mobile subjects pass through and engage with them, there remains work to do in order to more fully theorise relationships between the shaping of experience and embodied sense making. Some authors look to the work of Henri Lefebvre (1991), an important influence on Cresswell's tripartite formulation, for a fully articulated understanding of the relationships between bodies, infrastructures, technologies and equipment. In particular Lefebvre's (2004) rhythmanalysis informs both historical and contemporary studies of walking, cycling, and public transport, which have stressed the ways in which the polyrhythms of motion, stasis, engagement and detachment forge specific embodied experiences of movement (Hein et al 2008; Bissell 2009a: 2009b; Edensor and Holloway 2008; Edensor 2009; Fincham 2010). Yet as Burgin shows Lefebvrian derived rhythmanalysis is not as comfortable with the meaningfulness of reflexive cultural experience as it is with regulatory structurings and embodied affectivities. In this context, Burgin (1996: 30) has forcefully argued that a major stumbling block is Lefebvre's essentially passive understanding of perception. In this context rhythm is something which is done to people and rhythmanalysis remains firmly grounded in the search for a geology of underlying truth lying beyond historical specificity (Reville 2013).

So an important issue here is to find a theoretical perspective able to manage the relationship between routine and purposive action, habitual and reflexive conscious action through which embodied mobile subjects experience mobility systems as historically situated beings. More fully historicised accounts of the experience of mobility require approaches which are better able to engage and negotiate infrastructures and materialities in relation to practices and experiences. This is of practical as well as theoretical importance for historical accounts of mobile experience. In the absence of recorded oral testimony, researchers have to work with what materials remain – the built forms, material artefacts, documentary evidence literary, visual and sonic representations of past mobile practices. To engage with this material requires the mobility historian to move beyond a sense that the term infrastructure suggests passive sedentary and externalised structures or context which seems to be the antithesis of the experiential richness and fluid, contingent creative socialities and material engagements which characterise mobility studies engagement with embodied movement.

### **Communications, Post-phenomenology and the specificity of mobile experience**

In contrast to Lefebvre's search for underlying truths in rhythm, more recent theorists have figured rhythm in relation to an active sense of reception suggested by the term listening rather than a passive model of perception suggested by the term hearing. This begins to figure infrastructure and mobile experience as a much more active engaged and co-constructed set of practices. For Nancy, the sense of reverberation, the interference patterns created by the interaction between mobile bodies and their material context actively produce rather than simply reflect. Thus Nancy (2007: 5) argues in favour of a conception of sensing which has important implications for the study of mobile experience. In this case, *to sense* is *to make sense*: an active conscious process of sensible being in the world which operates across a range of registers from the habitual and affective to the reflexively conscious and conventionally representational. The intimately interconnected conceptions of sense making and shaping suggested by Nancy's is itself echoed in Ihde's (2003, 2009) self styled 'postphenomenology' of technology. By styling this as a 'post' phenomenology Ihde seeks to distance himself from the search for universal qualities in human experience which he argues characterise the phenomenologies of Merleau-Ponty and others. Key to this perspective according to Verbeek (2005:112) is the fusion of an existential phenomenology concerned with the ways in which human beings locate themselves and find and make meaning in the world and a hermeneutical phenomenology concerned with the ways in which systems, structures and equipment enable, constrain and shape experience. In this context Michel Foucault's musings on the "extraordinary" nature of the railway as a cultural product and producer of modern mobile life as at once environment, practice and experience, are surprisingly pertinent. The train, he said:

"... is something through which one goes, it is also something by means of which one can go from one point to another, and then it is also something that goes by."  
(1986: 23-24)

To a certain extent Foucault is merely reflecting ideas developed by media and communications theorists during the 1960s, encapsulated in McLuhan's slogan "the medium is the message" (1964). Yet there is more to his comment than this apparent simplicity might suggest. As simultaneously subject, object, representation and practice, the cultural experience of mechanised travel challenges the model of passive consumption developed by early theorists concerned with radio, TV and film from one of submissive hearing to active listening and fuses its metaphor of mediation with one of envelopment and immersion. Foucault's sense of technological shaping of experience as alternately traveller and bystander,

participant and spectator is echoed by others concerned with phenomenologies of technology. Miller (1987, 2005; see also Michael 2000), for example, adds a sense of active materiality derived from Hegel's *Phenomenology of Spirit*, to the social shaping of meaningful encounter taken from Goffman's symbolic interactionism and the technical framing of experience attributed to the art historian Ernst Gombrich. For Miller (2005:8), Hegel justifies an approach which denies any *a priori* separation between humanity and materiality. Peters (1999: 118) casts this formulation in the context of communication conceived as both a form of material/social exchange and a medium of sense making:

Hegel invites us to see subjects as intertwined with objects, selves as intertwined with others, and meaning as public rather than psychological.... The problem of communication for Hegel is not so much to make contact between individuals as it is to establish a vibrant set of social relations in which common worlds can be made.

The sense of communication as an immersive socio-technical medium shaping and giving meaning simultaneously to experience and material form suggested by Foucault's musing on the train is echoed by Ihde's call for a reworking of postphenomenology of technology as a theory of 'communicative interaction' (Langsdorf 2010). Perhaps it is not surprising that Ihde's approach is also informed by his earlier work on listening (Ihde 1976). Echoing interpretations of Hegel by Peters and Miller, Ihde's notion of communicative interaction is placed in direct contrast to the idealised rule governed terrain Habermas (1984) figures as the ground for meaningful dialogue in his theory of communicative action. Rather, a version derived from Ihde suggests communication as a 'discursive materiality' (Barad 2003, 2007), something messy, contingent, mutable and engaged across a wide range of affective and reflexive practices and through a heterogeneous assembly of materialities. In many respects thinking of mobilities through the notion of communication has a long and relatively conventional history. Histories of transport have long been situated within a wider history of communications which includes postal and newspaper services, and subsequently telegraph and telephony (Mattelart 2000). To this extent Urry's characterisation of a contemporary world built jointly on globalising patterns of movement and media, individual mobility and networked communications technologies builds on these older historiographies (Kern 1983; Urry and Elliot 2010). However, the broader sense of communication as both medium by which we experience the world and tools by which we come to understand it gives this reworked conception of communication new vitality. Such a notion is implied by Urry's formulation if only to the extent that individuals in contemporary society come to understand

themselves and their relations to others as variously immediate and distanced, whether privileged as fluid and connected, or disempowering, fixed and isolated. In this respect mobility studies' relationship to communications theory might have more in common with historical studies of situated subjectivity such as Connor's (1997) characterisation of the 'modern auditory "I"'. Thus, for Connor, the making of identity within the modern world is a product of modernity's communications networks. For him this is characterised by an auditory dynamic that locates us within "the switch-board experience" of modern life, found initially in early telephone systems, radiophonic broadcasting, and cinematic matter, which necessitate a new shuffling between 'rapture and capture', sight and sound.

The active, spatio-temporally specific and socially situated conception of sensing and sense-making suggested by the idea of listening implies both an openness to the heterogeneity of sensory experience and sensitivity to the ways in which particular events, actions, activities, artefacts and materials become meaningful within the spatio-temporal specificity of individual events (or utterances). This approach is characteristic of what has been variously termed as a cultural, post, or critical phenomenology in which active mediated conceptions of sensing and reception replace substantially universalised physiological models of perception (Connor 2000; Clucas 2000; Ihde, 2003, 2009; Sterne 2003; Born 2013). From this position Ihde suggests a fourfold register for 'the spectrum and varieties of the human experience of technologies (Ihde 2009:42). There are clear resonances here with Miller's formulation derived from Goffman, Gombrich and Hegel to the extent that Ihde embraces both performative social relations, and relations of technological framing within the context of fluid interactive and co-constructed conceptions of the social and the material. For Ihde, *embodiment relations* concern the ways in which material technologies or artefacts are incorporated into taken-for-granted bodily experience as prosthetic extensions of the senses, or as tools which are ready to hand. *Hermeneutic relations* which engage one's more linguistic, meaning-orientated capacities. In this case, though engagement remains *active*, the process is more analogous to our *reading or interpreting* than to bodily action. *Alterity relations* suggest the ways in which humans engage with technologies as quasi objects or quasi-others perhaps admitting room for issues of alienation, estrangement and objectification and fetishisation of particular technologies and technological systems; and finally, *Background relations*. These later bring into prominence the infrastructural qualities of technologies; that which is hidden or taken for granted (Ihde 2009:43-4). In these ways Ihde constructs his own way of conceptualising the fragile entanglements identified by Cresswell

and characteristic of our engagement with communications technology. Thus his formulation recognises some of the specificities of human engagement with technology, the possibility of alienation, its unacknowledged routine presence and the practicality of tools, whilst at the same time suggesting some of the concern with spaces of embodied experience, reflexive consciousness and symbolic representation evident in Cresswell or indeed Lefebvre. Most importantly Ihde champions what he calls a relational or in his terms ‘inter-relational’ ontology which is tuned to historical specificity.

Technologies transform our experience of the world and our perceptions and interpretations of our world, and we in turn become transformed in this process.

Transformations are non-neutral. And it is here that histories and any empirical turn may become *ontologically* important, which will lead us to the pragmatist insight that histories are also important in any philosophical analysis as such (Ihde 2009:44).

Thus Ihde’s fusion of precepts and concepts from phenomenology and pragmatism reject the transcendental and the universal as a starting point for a theoretical space that both starts from and takes seriously the lived qualities of experience. His approach to technologically mediated experience is open to the ways in which this experience is shaped by a wide range of material, embodied, symbolic and historical processes, affordances, traits, traces and inscriptions.

### **Mobile experience and spatio-temporal specificity**

The implications of taking the historically situated experience of mobility as an ontological starting point in the context of an approach to infrastructures, equipment, and technologies informed by ideas of communicative interaction might usefully be reviewed with regard to Schivelbusch’s (1986) well known discussion of ‘panoramic perception’. Schivelbusch shows how early rail travellers reported that they found looking out from a train disturbing and even nauseating. In his account, the new habit of reading whilst travelling helped transform perceptual experience. Now, travellers read a little and occasionally gazed passively over their reading matter out of the window and into the middle distance. By this means the reading matter rather than the landscape formed the focus of attention. Consequently the disorientating blur of the passing scene beyond the train was reduced from a main focus of attention to merely an occasional distraction. Thus according to Schivelbusch, railway travel was thus transformed into a substantially routine event that reorganised the perceptual space of the journey as one of detachment, objectification, alienation and theatricality. Thought of in terms of communicative practice the framed window of the coach running along level track

is both what the traveller knows and the way in which the traveller comes to understand their experience. The act of reading and gazing into the middle distance both shapes what is known about the social environment of the carriage and provides a set of resources and practices which enable the traveller to understand and give meaning to the experience within the carriage and world beyond the railway. Thus using Ihde's terminology, the story of panoramic perception can be understood through the *embodied relations* bound into the routine boredom of the journey and the ensuing sense of nausea in terms of *hermeneutic relations* including the cultural specificity of landscape perspective and the coping behaviour associated with social mixing in railway carriages. Subsequently the account connects *background relations* which include both the straight, level track running on bridges and embankments and the window framing the view to a set of *alterity* relations which include the objectifying contents of the book and the subsequent sense of distance from and spectacularisation of landscape created by the assemblage of book, soft sprung upholstery and framed glazed window.

Though Schivelbusch like Ihde and others concerned with the relationships between infrastructures, technologies and experiences takes historically situated mobile experience as an ontological starting point, Schivelbusch's phenomenology ultimately produces a univocal assertion of the experience of rail travel (Revoll 2011). Though the idea of panoramic perception has become a dominant way for academics to think about the phenomenology of the railway journey, this is only one of a number of possible ways of thinking about or experiencing the railway journey, either historically or geographically. For those not necessarily familiar with the dominant western aesthetic of landscape perspective, or those experiencing the conviviality, crowding and sometimes rowdiness of third class travel in 19<sup>th</sup> century Europe, contemporary Asia and Africa, or for urban commuter trains panoramic perspective does not necessarily define the experience of the train journey as an experience of detachment, isolation and ultimately alienation (Revoll 2012). Each of Ihde's registers call for a more clearly articulated and situated understanding of the shaping of experience within an historical context informed by pre-existing conventions concerning, for example, landscape observation and the cultural and social expectations of travel. Such historically and culturally specific conventions both initiate and give meaning to this changing mode of experience. The notion of communicative 'interaction' is important here not because it reduces experience to text but because it highlights the multi dimensional qualities of sense making as they work through a variety of practice and media and an active conception of the way

experience is shaped by the multiple specificities of media and practice. Most importantly, the notion of communication also highlights the sequential and enfolded qualities of experience. It recognises experience made through a temporally complex multiplicity of situating practices which, like acts of talking and reading, are informed simultaneously and chronologically by memories of the past and anticipations of the future as well as senses of being in the moment.

If thinking mobility systems as communicative assemblages enhances sensitivity to the historical specificity of mobile experience then this also suggests both the need to work with ways of experiencing the world which are current for specific peoples at specific times and to build theoretical understanding from concepts, ideas, understandings which are current in the historical moment of their experiencing. Though substantially focusing on the present within mobility studies perhaps one of the most useful examples of how this might be done within mobility studies is presented by the extensively researched topic of ‘automobility’. Work on ‘automobility’ illustrates the ways in which studies of mobility and travel can forge a constructive engagement between the embodied and affective experience of mobility, its cultural representation and the structuring and organisation of transport technologies. As Sheller and Urry put it (2000:739) automobility is ‘a complex amalgam of interlocking machines, social practices and ways of dwelling’ (see also Urry 2007; Featherstone, et al 2005). Automobilitation ‘creates independence and liberates its subject from spatiotemporal constraints, it also formulates new dependencies reembedding its users (and nonusers) into another, highly mobile, yet equally structured way of life (Beckmann 2001:600-601). Thus Beckmann (2001:602) claims:

As a result, the subject of automobilisation becomes its object. Rather than a self-determined subject, the car – driver is subjected to the expert systems framing this hybrid, which gradually turn him or her into the object of this very mobility paradigm.

Beckmann’s formulation clearly resonates with Foucault’s characterisation of the experience of rail travel to the extent that it suggests characteristics shared with other communicative systems. These include twin senses of shaping and sense making, the complex enfolding and mutual dependence of both subject and object, and immersive and reflexive experience. Thus the complex entanglements suggested by automobility engage with a mode of inhabitation that structures experience and shapes expectations to the extent that for many it has become impossible to think of life without and beyond the automobile. For ‘automobility’ the intersection of medium and message, shaping and sense making are fundamental to the well

known set of social and environmental problems which constitute automobility as a set of issues which define substantial areas of debate around current and future mobility. Yet, focus on the current and future impacts of automobility has diverted attention away from the importance of automobility as an historically specific formulation. Following the example of 'automobility' an important first move for researchers concerned with historically situated studies of mobile experience is to find an appropriate 'vehicle', medium or hermeneutical device which resonates with and connects specific mobility technologies with broader cultural formations and modes of habitation as simultaneous media for the shaping and sense making of experience. The mobilities literature suggests that many other forms of mobility can be productively thought of in this way. To cite only a few examples with more or less historical currency for specific mobile subjects one might think of 'Aeriality' (Adey 2010a), 'Velomobility' (Pesses 2010), or perhaps early 19<sup>th</sup> century romantic ideas of walking encapsulated in the 'Peripatetic' (Jarvis 1997: Solnit 2001), Ingold's (2007, 76-85) contrast between wayfaring and navigation in early modern Europe, or indeed Cosgrove's (2003) work on the transformative qualities of images of the earth from space. Recasting these and other such mobility regimes as communicative assemblages might begin to facilitate a constructive engagement between theories of embodied mobility and material histories of infrastructures, technologies and equipment in ways which historically situate experiences of mobility.

## **Conclusions**

This chapter began by considering the relationship between the apparently solid material histories of infrastructures, technologies and equipment and the fleeting ephemeral histories of mobile experience. It then examined the complex ramifications of these for the construction of mobile experience and looked at the ways in which mobility studies engages with notions of infrastructure and equipment in this context. Drawing on Don Ihde's self-styled 'post' phenomenology of technology, the chapter then examined the ways in which thinking about mobility systems in terms of communicative assemblages might help provide a more active and co-constructed sense of mobile experience. It is argued that refiguring mobility regimes in this way provides an enabling way of theorising the experience of mobility which are sensitive to and congruent with the lived experience of historical actors. Mobility studies consciously or otherwise sets itself against the undue focus on the infrastructures, equipment and material technologies of historical transport systems which for so long fascinated transport historians (Mom 2003, Mom et al 2009). This chapter argues that

it might be time for mobility historians to engage with and reclaim important dimensions of those often discarded histories if we are to more fully situate the historical experiences of mobility.

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