

Article



Journal of Consumer Culture 2018, Vol. 18(1) 60-82 © The Author(s) 2016 Reprints and permissions. sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/1469540516634417 journals.sagepub.com/home/joc



Moving across the life course: A biographic approach to researching dynamics of everyday mobility practices

Mary Greene

NUI Galway, Ireland

Henrike Rau

Ludwig-Maximilians-Universität München, Germany

Abstract

This article connects existing mobility biographies research with social practice inquiries into the dynamics of consumption and examines the potential of a biographic, practicecentred approach for researching everyday practices. Following a critical review of the benefits and limitations of existing research on mobility biographies, the article explores some key ways in which a practice theory approach can be employed to reframe and extend how dynamics of mobility over the life course can be conceptualised and analysed. A key feature of the discussion is a consideration of the ways in which the concepts of practice and career can broaden investigations of practice biographies to include various perspectives and scales. The article then outlines the development and application of a biographic, practice-centred methodology which was employed in an ongoing mobility biographies study based in Ireland. In demonstrating the potential of this approach for researching practice careers across the life course, empirical data relating to an individual's career-in-car-driving are presented and discussed. The article concludes that, despite some limitations, practice-centred biographic approaches offer potential for addressing some unanswered questions regarding mobility practices.

Keywords

Life course, social practices, car driving, careers, biography, mobility

Corresponding author:

Mary Greene, School of Geography and Archaeology, Discipline of Geography, NUI Galway, Galway, Ireland. Email: mary.greene@nuigalway.ie

Introduction

Understanding the dynamics of everyday consumption practices and their transformation across the life course is central to comprehending and potentially encouraging more sustainable practices (Rau et al., 2014; Schäfer et al., 2012). Everyday mobility practices that revolve around the 'consumption of distance' (Heisserer and Rau, 2015) represent a key focus for scientists, policy makers and practitioners in the sustainability arena. In this context, the rapidly expanding field of mobility biographies research has produced insightful work on the dynamics of individuals' everyday mobility practices over the life course, including changes around major life events such as arrival of first child, or residential relocation (e.g. Lanzendorf, 2003; Müggenburg et al., 2015; Rau and Manton, 2015; Scheiner and Holz-Rau, 2013b; Schoenduwe et al., 2015). Recent efforts to reconceptualise and study everyday mobility as a dynamic practice have thrown up interesting theoretical and methodological questions regarding, for example, the appropriate focus and scale of inquiry, the nature of human behaviour and its transformation over time, as well as practical issues specific to longitudinal work such as time constraints or gaps in people's recollection of past practice (Heisserer and Rau, 2015; Jaeger-Erben, 2013).

Nevertheless, the question how and why people develop, maintain or change routine mobility practices has only been partially answered. Considerable gaps in knowledge remain that reflect the continued dominance in consumption research of conceptual and methodological approaches that rest upon misconstrued static conceptualisations of human behaviour (cf. Blue et al., 2014; Hards, 2012; Rau et al., 2014). Within mobility research more broadly, a general lack of attention to temporality has been reflected in the persistent popularity of cross-sectional research designs that link people's present attitudes and behaviours to current contextual conditions in an effort to understand and predict their behaviour (Jones et al., 2014; cf. Rau and Edmondson, 2013 for a more detailed discussion of cross-sectional work and its implications for understanding behaviour). In addition, mainstream approaches that focus on individuals' travel behaviour continue to outnumber studies that adopt a more sociological, relational perspective, most notably those that draw on theories of social practice (hereafter referred to as SPT (Social Practice Theory)). This last distinction is particularly important as the two approaches rest on divergent understandings of human behaviour, sociality and change.

This article falls firmly into the latter category by reconceptualising everyday travel behaviour as mobility practice. In doing so, it aims to contribute to current debates on appropriate concepts and methods for exploring dynamics in everyday consumption practice more generally, and mobility in particular, by linking the field of mobility biographies with SPT approaches. To complement this, we discuss the development and application of an innovative retrospective qualitative methodology for analysing dynamics in car driving across the life course, drawing on empirical data from a mobility biographies study in Ireland. Here, the article ties in with recent innovative work on biographical dynamics in practice (cf. Butler et al., 2014; Groves et al., 2016; Hards, 2012; Henwood et al. 2015; Spurling, 2010), with

a view to raising additional theoretical and methodological questions for further exploration. Although the article's primary aim is not to present data but to illustrate the utility of a biographic, practice-centred methodology in representing and exploring life-course dynamics, it refers to illustrative empirical examples throughout.

The article commences with a brief overview of recent mobility biographies research, identifying some considerable gaps in the field. Building on this, the potential of an SPT approach is discussed. Thereafter, the practice-centred, biographic methodology is introduced and its application in the research context is traced. The article then demonstrates the potential of the methodology for researching practices across the life course using an illustrative case of an individual's career-in-car-driving. The article concludes that, despite some limitations, practice-centred biographic approaches open up a fruitful avenue for addressing some unanswered questions regarding mobility practices.

Dynamic approaches to mobility practice

Investigating mobility biographies: Everyday travel practices across the life course

Recognising the limitations of cross-sectional designs, social-scientific mobility research has moved towards more dynamic, longitudinal approaches, broadly termed the mobility biographies paradigm (Scheiner, 2007; Scheiner and Holz-Rau, 2015). This has led to a rapidly expanding body of work adopting a life-course approach to study changes in individual travel behaviours. A review of the field reveals significant variation in terms of the analytical focus, methodological approaches and temporal focus (Jones et al., 2014; Müggenburg et al., 2015; Rau and Manton, 2015). A significant volume of work focuses on the effects of significant, clearly identifiable life events, such as relocation or the birth of the first child, on individuals' travel behaviour (e.g. Clark et al., 2014; Lanzendorf, 2010; Rau and Manton, 2015; Scheiner and Holz-Rau, 2013b). These event focused mobility biography studies have shown that changes in routine travel behaviour occur rather unevenly across the life course. Some life events, such as the transition from education to employment or starting a family, appear to initiate radical shifts in the organisation of everyday mobility while others coincide with phases of relative stability.

Methodologically, this field has been dominated by quantitative methodologies employing large-scale data to model different trajectories and identify life events and domains that impact individuals' travel behaviour. Methods employed have ranged from longitudinal analyses of existing panel data to retrospective studies based on self-completion surveys (Müggenburg et al., 2015; Rau and Manton, 2015). However, while this work has been important in capturing large-scale trends in travel behaviour across the life course and revealing the significance of major life events, many of the processes and mechanisms by which change occurs remain unclear (Jones et al., 2014; Müggenburg et al., 2015).

Recent efforts have broadened the scope of analysis to capture the influence of contextual factors that shape both life events and travel behaviour. Here, context is loosely defined as a set of factors that influence the cognitive and behavioural dimensions of travel behaviour. These have included gender (Scheiner, 2014), social networks (Axhausen, 2008), the built environment (Chatterjee et al., 2013), spatial contexts (Clark et al., 2014; Scheiner and Holz-Rau, 2013a), and cohort effects (Hjorthol et al., 2010; Scheiner and Holz-Rau, 2013a). Moreover, it is possible to observe interaction effects between contextual variables, life events and travel behaviour. For example, Clark et al. (2014) used UK panel data to show the effect of spatial context on travel behaviour around key life events. Similarly, Lanzendorf's (2010) work captures interactions between key events (e.g. relocation, new job, arrival of first child) and behaviour changes across the three domains of lifestyle, accessibility and mobility. Cohort and period studies provide further insights into contextual effects. For example, a quantitative analysis of panel survey data by Hjorthol et al. (2010) found that while car ownership tends to increase up until retirement and then declines thereafter, in general car ownership has increased over successive generations, pointing towards the importance of historical location and cohort membership on travel behaviour.

However, these attempts to direct attention towards context, while welcome, remain at best incomplete, mainly because they treat context quantitatively, as a set of external variables that influence individuals' decision-making. This ignores the role of individuals as active and socially connected change agents whose practices both shape and reflect the structure, composition and logics of the social settings they inhabit. Moreover, individualist-rationalist conceptions of everyday decisions and habits have dominated, leading to a 'portfolio model of human action' (cf. Warde and Southerton, 2012). Here, life-course transitions constitute 'moments of change' when automated habits become subject to reflection, shifting the unconscious into consciousness, and thus offering opportunities to reset habits (cf. Verplanken et al., 2008). However, the onus is essentially on individuals to alter their decisions, with the overall aim of putting rational sovereign consumers back in charge of their conduct.² Perhaps as a consequence of the continued centrality of individualist-rationalist approaches, there has been little consideration of sociosymbolic, material and institutional dynamics and how these intersect with dynamics in performance over time (Cairns et al., 2014; Heisserer and Rau, 2015). As such, questions remain regarding how wider structural processes, including changes in value orientation, legislation or policy, intersect with individuals' mobility biographies (cf. Müggenburg et al., 2015; Rau and Manton, 2015).

Furthermore, in terms of temporal orientation, much existing research has focused on particularly dynamic life stages characterised by frequent transitions rather than dealing with the life course in its entirety, including phases of relative stability (Jones et al., 2014). In addition, much quantitative work to date has adopted a rather homogeneous, over-simplified picture that fails to recognise and represent diversity in life-course circumstances and experience (Cairns et al., 2014; Schoenduwe et al., 2015). This raises the question, what might a less

individualised and more sociological approach offer to this field of inquiry, especially if it is combined with innovative empirical approaches to studying dynamics across the life course?

To summarise, existing mobility biographies work has significantly advanced understanding by moving beyond static approaches to capture the influence of major life events on travel behaviour. However, conceptual and methodological tools, most notably the actor-centric perspective, strong focus on quantification and aggregation of individual-level data, have been less suitable for exploring processes at the level of situated social practices. Some critical gaps in understanding remain, with SPT approaches offering promising ways to address these. Approaches that move beyond the individual to re-contextualise the study of mobility as a social practice represent an alternative to prevailing individualist views of change. The following section outlines SPT as an innovative conceptual approach through which these some limitations of mainstream approaches can be addressed.

Reconceptualising travel behaviour as mobility practice — The potential of a social practice approach

Within consumption research, a paradigmatic shift has occurred towards SPT as a means to conceptualise and study dynamics of practices (cf. Røpke, 2009; Shove et al., 2012; Warde, 2005). However, travel and mobility research has not yet shown the same uptake of SPT, despite some recent noteworthy exceptions (cf. Barr and Prillwitz, 2014; Heisserer and Rau, 2015; Shove et al., 2015; Watson, 2012). This emerging work is clearly demonstrating the significant potential of practice approaches for advancing understanding of everyday mobility. However, to date, mobility biographies research has been largely unaffected by these recent trends towards SPT. Using the exemplar of car driving, this section outlines different ways in which SPT can advance the study of everyday mobility. In considering the specific implications of SPT for mobility biographies research, it asks how the concept of 'career' could broaden the investigation of practice biographies to include various scales and temporalities.

What then can SPT add to the study of mobility biographies? At the most basic level, it implies reconceptualising travel behaviour as a situated social practice (Barr and Prillwitz, 2014) that undergoes various transformations over time. The key proposition underlying SPT is that individuals' performance of distinct sets of everyday practices reproduces social structures (Bourdieu, 1977; Giddens, 1984; Schatzki, 1996). In addition, SPT proffers to connect micro and macro approaches to social analysis by highlighting the interconnections between routinised everyday conduct and larger-scale institutional development (Reckwitz, 2002). In this sense, structure and agency are taken to be mutually constitutive, recursive and simultaneously determined through time and space. Thus, rejecting analyses that draw exclusively on either of the juxtaposed models of *homo economicus* or *homo sociologicus*, practices are presented as the constitutive social elements through which we

can understand actions, institutions and structures (Shove et al. 2012; Warde, 2005).

Applying SPT to the study of everyday mobility practices across the life course thus brings about a fundamental shift in how agency, context and change processes are approached (Warde, 2005; Watson, 2012). While existing work has highlighted the ways in which attitudinal and contextual variables interrelate with life events in shaping individuals' mobility biographies, an SPT perspective reframes this discussion away from individual behaviour towards the dynamics of practices. Barr and Prillwitz (2014) argue that such a shift in perspective is crucial as

social practices are more broadly conceived than habits in that they place current individual routinised behaviours into both a social and a historical context, thus recognising how apparently individual choices are framed by contemporary trends and the development of such trends over time and space. (p. 7)

Importantly, then, an SPT perspective moves away from utilitarian individualist conceptions of travel as movement from A to B to instead focus on the embeddedness of mobility practices in everyday life as well as wider socio-symbolic and techno-material contexts as they emerge and change (through) space and time (Heisserer, 2013; Heisserer and Rau, 2015).

In considering the embeddedness of mobility in everyday life, SPT directs attention to the ways in which forms and modes of mobility such as car driving allow socially valued practices to be accomplished, including getting to work and school, shopping, visiting friends and so on (Cass and Faulconbridge, 2016; Shove et al., 2015). In this sense, habits and routines can be conceptualised as the reproduction of stable social practices, thus drawing attention to the recursive interaction between collective and social temporalities and the structure and allocation of practices in daily life (Southerton, 2013). Furthermore, reframing research questions to conceptualise 'car dependence as a feature or characteristic not of people or of places but of practices', Shove et al. (2015: 275) highlight ways in which complexes of social practices (e.g. shopping, mobility and work) and the infrastructures that underpin them have evolved together as they have been reconfigured in time and space via an overall process of spatial distancing between sites and services.

Reconceptualising car driving as a distinct, integrated³ social practice makes it necessary to explore how practices and their transformation have been understood in the literature. Focusing on practice directs attention to the embodied, material, temporal and spatial organisation of human action, but it also implies a recognition that practices are made up of a unique set of elements (cf. Shove et al., 2012). For example, Reckwitz (2002) views practices as distinct entities composed of a unique set of elements and highlights processes of routinisation in their (re)production:

A 'practice'... is a routinized type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities,

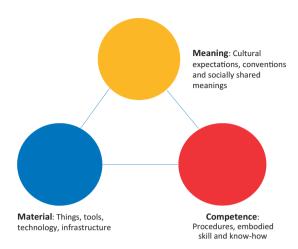


Figure 1. Dynamic elements of social practice (adapted from Shove et al., 2012).

'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. (pp. 249–250)

Importantly, this suggests that the elements of a practice are the property of the practice itself rather than that of individuals. In this sense, a given practice such as car driving exists as an entity that is in 'some sense transcendent of individual incidences of its doing'. However, 'a practice must also exist as performances, the accumulation of those incidences of doing' (Watson, 2012: 489). Here, Schatzki's (1996) distinction between practice-as-entity and practice-as-performance aptly incorporates these two dimensions that exist in parallel and that are in constant dynamic correspondence with each other (cf. Heisserer and Rau, 2015). How practices-as-performances and practices-as-entities mutually shape each other over time and across space thus poses an important question for mobility studies (Shove et al., 2012; Spurling and Blue, 2014; Warde, 2005).

A key focal point of research on consumption practices has been to explore the careers of practices-as-entities. Here, Shove et al.'s (2012) dynamic model which treats materials, meanings and competences as key constitutive elements of a practice has been instrumental (see Figure 1).

According to this view, the reproduction and transformation of practices can be studied by examining changes in the specific configurations of the elements that constitute them. These configurations are historically and geographically grounded in specific normative and material contexts and thus vary across time and space. Practices develop specific trajectories or 'careers' as routines and habits continually evolve through the emergence and dissolution of linkages between elements. The practice of driving a car, for example, came into being and diffused over time and space during the past two centuries, during which period its key elements – cars, infrastructure, skills required to drive as well as rules and norms about driving in

society – have continuously evolved in different ways around the world (Cairns et al., 2014). Significantly, SPT challenges commonly held views of change as exceptional or 'out of the ordinary', instead emphasising the highly dynamic nature of everyday practices and their role in social reproduction, thus shifting attention towards biographies of practices (Shove et al., 2012).

In positing practices as the unit of analysis, practice theory offers a very different approach to understanding the relations between individuals and their actions than that of dominant mobility biography approaches. In decentring the individual and instead 'placing the practices which constitute individual lives at the centre of analysis' (Watson, 2012: 490), SPT offers a radical and distinctive perspective on human agency and subjectivity. Instead of practices and actions being seen as reducible to individuals, individuals are conceptualised as 'practitioners', 'carriers' or 'hosts' of practices. In other words, SPT does not attribute meanings, knowledge or competencies to be the property of individuals, but rather see these as constituent elements of practices. The processes by which an individual becomes 'enrolled' or 'recruited' to a practice, that is, how they become practitioners, emerge as a central focal point for analysis (Warde, 2005).

However, this explicit emphasis on practices as the unit of analysis should not imply that we lose sight of the importance of individual lives (Hui and Spurling, 2013; Spaargaren, 2013). Practices, of course, depend upon individual performances for their continued survival and it is individuals who carry and integrate the necessary skills and knowledge that make each performance possible (Reckwitz, 2002). Indeed, practice theorists are careful not to overemphasise the structuring effect of practices on individuals. Rather, individuals, as 'carriers' of practices, are active, knowledgeable and capable bodily and mental 'agents who make use of the possibilities offered to them in the context of specific systems of provision' (Spaargaren, 2003: 688) and whose skilful engagement with and performance of practices is crucial to their reproduction and transformation (Giddens, 1984).

With respect to understanding change more broadly, and the evolution of mobility biographies in particular, the question of individuals' 'careers' of engagement with a practice across the life course arises as an important area for analysis. In this respect, Shove et al. (2012) stress the importance of individual and collective 'careers' of engagement with practice for patterning of energy demand over time, reminding us that 'the lives of practitioners and practices interact' in the dynamics of practice as it plays out over time and space (p. 39). Thus, as Warde (2005: 149) recognises, the question of how a practitioner's career takes off, develops and changes over time is crucial for understanding dynamics in practice.

To date, however, the relationship between individuals and practices has not been explored in a systematic way (Hui and Spurling, 2013). Indeed, most existing longitudinal practice research focuses on larger-scale processes to trace shifts in prevailing norms, technologies and at an aggregate societal level (e.g. Anderson, 2014; Southerton, 2009). In contrast, there has been a paucity of work exploring practitioners' biographies or careers-in-a-practice (Hui and Spurling, 2013), despite

the significance of an individual's lifelong experience for their engagement with practices (cf. Shove and Pantzar, 2007; Spurling, 2010). Instead, many practice-theoretical studies have, to date, endorsed a rather static framing of individuals as carriers of requisite elements needed for the enactment of practices. However, individuals, too, have a history and future of performances that are 'woven together within a life' (Hui and Spurling, 2013: 2). This implies that at least two temporal scales of analysis, as well as their interactions, are important for understanding emergent mobility dynamics: that of the career of the practice-as-entity in question and that of the individuals' career-in-a-practice over biographical time.

Extending the concept of 'career' to include individuals' lifelong engagement in a practice can help to shed light on the complex and dynamic linkages between individuals' lives and the developmental trajectory of practices. To this end, an individual's career-in-a-practice can be conceptualised as a biographic repository in which elements such as embodied skills, knowledge, meanings and changing technologies are accumulated, rearranged, replaced or removed over time. This implies recognising that processes of accumulation, rearrangement and integration of elements are shaped by prior biographic experience as well as wider social, spatial, temporal and structural contexts (Hui and Spurling, 2013). Here, the ways in which shifting cultural conventions and institutional norms and standards at the macro scale intersect and interrelate with the trajectories of individuals' career-in-apractice at the micro scale become a key question. Furthermore, in investigating practice dynamics through the lens of life-course transitions, analytical attention is directed towards crucial turning points in individuals' career-in-a-practice and their potential connections with major life events. Moreover, it necessitates recognising that practitioners may be engaged in multiple, concurrent practice careers throughout their lives. For example, work, family, mobility and food careers can evolve and intersect in different ways as commitments and roles shift and change throughout biographical time. In other words, while studying a career-in-a-practice foregrounds the practice under investigation, it must be recognised that the practice in question only gains coherence when set against the backdrop of 'the integration of many practices and many careers within an individual's life' (Hui and Spurling, 2013: 7). Such investigations can thus explore how patterns, flexibilities and tensions emerge between concurrent careers in individual practitioners' lives as they move through particular life-course transitions.

A final application of a career-centred practice approach relates to the investigation of historical changes in the social differentiation of practices across generations. In this respect, explicit recognition of the changing demographic picture of multiple careers-in-a-practice (Hui and Spurling, 2013) emerges as important for thinking about how practices take hold and develop in society. For example, in considering the development of car travel as an 'initially exclusive activity, becoming increasing popular and plural' (Warde, 2005: 139), the recruitment of new socio-demographic groups, including women and lower classes, to the practice of car driving has been crucial to its expansion (cf. O'Connell, 1998 for a class and gender focused historical analysis of access to the car in Britain). In this respect, an

individual's career-in-a-practice must be situated within the context of the broader socio-historical context in which it develops.

In summary, applying SPT to the study of everyday mobility offers a highly contextualised and dynamic approach that can help advance understandings of the relationship between individuals' lives and practices over time. A biographic, careercentred approach implies asking novel questions about how mobility biographies might be analysed. Importantly, both practice and life-course approaches offer concepts and methodological tools that can be fruitfully employed to design and implement dynamic approaches to empirical practice research. The remainder of the article discusses the empirical approach developed for an investigation into the biographies of mobility practices and their practitioners in an Irish context.

Methodology

Efforts to empirically connect individuals' careers-in-a-practice and wider historical changes offer exciting opportunities for multi-scalar, practice-centred lines of inquiry. However, they also involve considerable methodological challenges, many of which relate to choosing practices as main units of analysis. Often, traditional research methods fall short in their ability to capture the dynamic nature of practices as well as their contextual elements (Blue et al., 2014). This partly relates to the continued dominance in social research of ontological and epistemological standpoints that focus on either the activities of individuals or the influence of wider structural conditions (e.g. policy landscape) but rarely on their interactions (Spurling, 2010). Innovative, context- and time-sensitive methods are thus needed to capture individuals' careers against the backdrop of wider changes in the 'systems of provision' that underpin them (cf. Rau et al., 2014). Biographic methods provide 'a sophisticated stock of interpretive procedures for relating the personal and the social' (Chamberlayne et al. 2000: 2), thus offering fruitful pathways for structurationist empirical investigations. In cross-fertilising life-course approaches and SPT, the methodological design for this study combined various biographical, practice-oriented tools to collect and analyse data on individuals' career-in-a-practice over the life course and against the backdrop of the wider history of mobility practices in Ireland.

Developing a biographic, practice-based methodology

The research design for this study combined a multi-pronged biographic approach with an in-depth investigation of (infra)structural and institutional developments relating to mobility in Ireland. Following extensive piloting, the final methodology comprised four distinct yet interconnected stages: (1) detailed desk research on the history of practices, (2) biographic interviews employing life-course timelines and practice career graphs, (3) practice diaries and (4) follow-up interviews. Table 1 details the four stages and provides an overview of the data generated during each phase as well as how it was employed for analysis (see section 'Analysing practice careers').

Table 1. Overview of methodology.

Data collection phase	Overview of material generated	Analysis
Phase I: Desk Study	Key milestones and transitions policy, structural and cultural contexts of mobility practice in Ireland over 20th and 21st centuries	Zooming out Plotting structural and policy development trajectories
Phase 2: Interviews Life Path	Practitioner's life history and practice careers Life history timeline; narrative biography Mobility practice graphs; narrative discussion	Zooming out Constructing broader biography Constructing individual life- path career-in-car-driving
Phase 3: Diary (2 weeks) Daily Path	Material, temporal, social and spatial contexts of current mobility practice Socio-demographic questionnaire	Zooming in Constructing daily-path practice dynamics
Phase 4: Interview Life Path, Daily Path	Narrative discussion of practice diary Narrative discussion of every-day mobility practice at previous life stages Future reflection on life-course career in practice and relation with macro changes	Zooming in and out Constructing daily-path practice dynamics at different life stages Constructing individual's lifepath career

Sample

The research involved 18 people who participated in a recent representative cross-sectional survey of household consumption in Ireland (cf. www.consensus.ie). Purposive sampling ensured the recruitment of respondents with diverse views, habits and life-course circumstances. Selection criteria included age/birth cohort, gender, family structure, income, location and reported levels of environmental concern and practice. The rationale for this emphasis on diversity was to expand the range of insight into practice dynamics in general. Field work took place between November 2013 and December 2014. See Table 2 for an overview of participants by gender and cohort.⁹

Analysing practice careers

Adopting the two-pronged strategy outlined by Witzel and Reiter (2012: 102), analysis of primary data relating to individuals' biographies (Phases 2, 3 and 4)

Born	1925–1940	1941–1955	1955–1970	1970–1985
Male	Tony	Henry Michael Frank	Timothy James	Daniel Kieran
Female	Brigit Grace Billie Breda	Martha Triona Alison	Claire Sara	Catriona

Table 2. Participants by gender and cohort.

combined detailed examinations of stability and change within each individual case (vertical analysis) with an exploration of themes across cases (horizontal analysis). To explore changes in practices, a retrospective picture of the evolution of individual's practice careers (in this case driving a car) was established. Triangulation of practice career graphs and interview and diary data helped to construct a life path of how practice careers developed over individuals' lives. ¹⁰ The visual-graphic methods proved particularly useful for capturing when, how and at what rate change occurred. By embedding practice dynamics in their biographic and sociohistorical contexts, it was also possible to demonstrate the role of time and space in creating or foreclosing the circumstances for the development of practice careers (cf. Hards, 2011).

Using biographical interviews supported by life-course tools (Phases 2 and 4), individuals' careers were constructed to identify periods of relative stability and change. Life graph drawing techniques (Hards, 2012; Howell, 2013) stimulated and supported interview discussion and helped to create a holistic picture of the development of individuals' careers-in-car-driving in the context of life-course transitions and phases identified as salient by them. Retrospectively, respondents reflected on their entire life course to consider the timing and order of phases and to identify critical milestones, turning points and transitions in their practice careers.

Following Hards' (2011) analytical approach, the direction, tempo and contexts of change received particular attention. Phased practice trajectories represented the direction of change in terms of levels of car use (driving) as increasing (positive slope), decreasing (negative slope) or stable (flat line). Furthermore, the gradient of the graph reflected the rate of change, with participants drawing sharp inclines or decreases to represent periods of rapid and sudden change and more gradual slopes to represent periods of slower transition.

Below, an illustrative case of a participant's career-in-car-driving shows how the methodology was used to record and visualise dynamics. Claire is a 56-year-old secondary school teacher, divorcee and mother to four adult children who have recently left home. Living in Ireland all her life, she always resided in urban areas

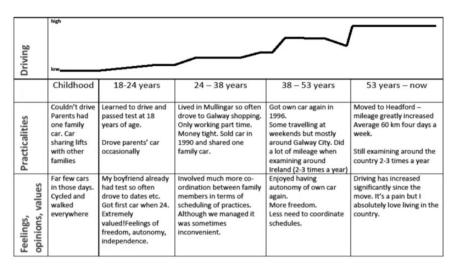


Figure 2. Claire's career-in-car-driving.

until her recent decision to relocate to the countryside to live with her new partner. Figure 2 is a visual representation of Claire's career-in-car-driving over time.

Claire's graph displays a mixture of sudden and sharp changes alongside more gradual transitions, interspersed with periods of apparent stability (Figure 2). The resulting pattern reflects a biography of alternating flat and upward trajectories of varying degree, representing an overall increase in car use over time. Such a positive car use trajectory (upward curve/line) was very common across the entire sample while a downward curve/line proved much rarer.

Contextualising practice careers

The methodological approach pursued also facilitated an investigation into the ways in which individual lives, everyday practices and wider institutional developments interact to create particular practice dynamics over time (cf. Spurling, 2010). Linking primary data to existing evidence of (infra)structural and institutional developments regarding mobility (Phase 1), it was possible to explore the ways in which socio-historical developments shape individual careers. For example, the contextualised account of Claire's career-in-car-driving in Figure 3 plots individual-level changes against wider mobility-related transformations in society.

While it is not possible to draw definitive conclusions based on a single case like Claire's (or indeed on the small number of cases in this study), the predominance of positive car use trajectories within the sample nevertheless pointed towards the centrality of structure in the formation of individuals' career-in-a-practice. It furthermore emerged during interview discussion that developments in transport infrastructure, the standardisation of rules and regulation regarding transport and mobility, the introduction of new policies (e.g. carbon taxing, National Car

Driving	low					
S	Child-hood	18-24 years	24 – 38 years	38 – 53 years	53 years – now	
MMs		Drivers licence + first car	Selling own car + use of family car	Own car again	Long-distance commuting	
Time	1960s-early 1970s	1970s	1980s-mid-1990s	mid-1990s-late 2000s	late-2000s-mid-2010s	
Social and policy context	Poor transport policy Little regulation	Rise in car use and regularisation Emergence of 'car culture' in Ireland Poor infrastructure	Economic recession Little development in policy context	'Celtic Tiger' economic and housing boom Car-centred transport policy Rapid rise in car ownership and use	End of 'Celtic Tiger' + recession 'Smarter travel' policy BUT: Land use and transport legacy of CT era	

Figure 3. Contextualised version of Claire's career-in-car-driving.

Test) as well as sudden economic shifts (e.g. banking crisis in 2008) all played a role in shaping Claire's practice. For example, her decision in her early 50s to move into the countryside and commute considerable distances reflects society-wide trends towards urban sprawl and long-distance commuting in Ireland during the Celtic Tiger economic boom (1995–2007). According to McDonald and Nix (2005), large commuter belts emerged during that period, especially but not exclusively around Ireland's capital Dublin, due to rapid, credit-fuelled increases in house prices that forced many low- and medium-income households out of the cities. A large-scale road construction programme as well as relatively low motoring costs further exacerbated this trend towards commuting (cf. Rau et al., 2015). The research design introduced in this article is clearly capable of capturing such intersections between individuals' careers and medium- and long-term processes of social change, at least to some degree.

Zooming in and out

Upon establishing a broad picture of change, interviews and diaries (Phases 2, 3 and 4) shed light on the conditions and practices associated with specific periods of stability and change (daily path). This method of 'zooming in and zooming out of' a practice (cf. Nicolini, 2009) made it possible to alternate between different temporal contexts and aspects of change (see Table 1). A commitment to representing multiple temporalities complemented efforts to capture different scales of context. Overall, the research process involved regular, deliberate movement between

different theoretical lenses (life course and social practice), temporalities (daily and life paths) and scales (micro, meso, macro).

Applying an SPT frame that focused on individuals and contexts during the analysis of interviews offered an effective means for exploring how routines are constructed, maintained and deconstructed over time. Zooming in to critical turning points and transitions, narratives were explored for sequences of causally related events that shaped people's interaction with the key elements of a practice. The diaries were a useful tool for stimulating discussion with participants on the workings of their routines at different life stages. For example, Claire's account of how she learned to drive at the age of 18 years revealed a complex mesh of meanings, motives and contexts that shaped her recruitment to driving:

It was fantastic! It really opened up a whole lot of things...the independence and freedom and being able to take a crowd in the car and be popular (laughs) and all that kind of stuff. Yeah it just opened up a lot of new avenues that you couldn't do on a bike. (Interview 1, January 2014)

In detailing her experience, Claire emphasised various positive images of driving, including independence, freedom and popularity. Her narrative suggests that becoming a practitioner formed an important aspect of her developing young adult identity, with these positive connotations of car-based mobility being mirrored in wider society. In addition, the availability of intergenerationally transferable forms of social and material capital created favourable conditions for Claire's car driving career. In terms of material resources, her parents purchased a second car so she could learn how to drive. With all maintenance and running costs covered by Claire's parents, this was a crucial resource for someone of her age. Furthermore, both her boyfriend and her father imparted to her the rules and procedures of the practice (driving) and supervised her performance. Through repeated performance of driving, Claire subsequently increased her proficiency and confidence, highlighting the significance of interactions between biographic circumstance and socio-material capital in creating contexts in which agency can develop and evolve.

Furthermore, Claire's coming of age coincided with the emergence of a car-based mobility culture in Ireland (see Figure 3). Her biographical narrative clearly reflects this, with episodic accounts situating her discussion in the context of broader changes in mobility norms and practice in Ireland. In other words, the development of Claire's personal meanings about car driving cannot be separated from society-wide shifts in mobility-related norms. The importance of socio-historical timing and location was brought into relief by Claire when she compared her driving career to that of her mother's. Reflecting on her experience of learning to drive, she compared this to her mother's lack of opportunity to become a driver:

My mother never learned to drive. So she would walk us to school in the morning. Dad would be gone with the car and she didn't drive...It was always Dad's car.

You know it was that very old fashioned 'it's Dad's car'. It was just very standard at the time. It was just the way it was...I ensured I got driving lessons because I saw how disadvantaged my mother was by not being a driver, dya know what I mean?...But by then it was just kind of run of the mill. It was kind of just what everyone was doing. Everyone had a car, or had a boyfriend who had a car, you know. It was just kind of routine. (ibid)

Here, Claire's reflective account suggests that, for her, driving as a practice derives meaning and intelligibility from the socio-historical context in which it was performed. In the context of car driving – a culturally situated, mediated, and power laden activity – dynamics of gender and wider socio-economic contexts in Ireland such as labour relations and property ownership shaped normative understandings of the practice as well as the conditions of possibility for participation. For instance, gendered forms of exclusion regarding car ownership and driving were evident in Irish society until the latter half of the 20th century, with traces remaining to date. In the past, women's exclusion occurred across all three elements of the practice: driving a car was understood as a predominantly male practice (meanings), with driving skills being largely taught to male practitioners (competences) who were also expected to own a car (materials). The meaning Claire attributes to becoming a proficient driver herself in the 1970s was related to this gendered history of practice; she was strongly motivated to learn how to drive because of her first-hand observations of the restrictions and constraints that her mother experienced. Claire's account helps to show how what is a subjective experience is in fact institutionally structured and historically and spatially situated. By connecting Claire to a specific cohort and grounding her account in rich and nuanced empirical evidence, the role of historical and institutional context in creating or foreclosing opportunities for developing an individual career-in-a-practice is demonstrated.

Overall, this snapshot into Claire's case highlights the potential of a biographic, practice-centred approach to understanding life-course dynamics in relation to the practice of driving a car. In exploring intersections between temporalities of individuals' lives and practices, a contextually sensitive and dynamic approach to mobility biographies emerges. This said, the adopted methodological design is not without its limitations. While the emphasis on a life-path view is useful for studying continuity and change, there is a risk that capturing major events eclipses evidence of variability in daily patterns during various life stages. The 'subjective and shifting nature of people's representations of their practices' (Hards, 2012: 768) and the related tendency for people to sometimes overplay the significance of turning points and transitions when viewed retrospectively, can pose particular challenges in this respect (cf. Rau and Manton, 2016 for a related discussion regarding retrospective approaches to quantitative mobility biographies research). However, the analytical tool of zooming in and out between life-path and daily-path perspectives proved useful for honing in on dynamics occurring during key life stages (detailed analysis of which is forthcoming).

Indeed, when prompted with a range of tools, the amount of detail participants could describe in relation to the workings of their routines many decades ago has been surprisingly articulate and reflective (cf. Browne, 2015; Hitchings, 2011). Furthermore, connecting individual experiential accounts with social policy and structural contexts can help to mediate some of these concerns in relation to validity and verifiability.

Conclusion

This article set out to demonstrate the potential of a biographic, practice-centred perspective for researching mobility biographies and addressing some unanswered issues in the field. While extant mobility biography approaches have drawn attention to the changing dynamics in individuals' lives and how these shape action, they have tended to treat context and practice as static and unchanging. Conversely, existing practice investigations, while emphasising the dynamic nature of practices, have paid less attention to individuals' lives and in doing so have often implicitly posited the individual as a static carrier of elements. In this respect, a combined biographic, practice perspective methodology offers a temporal, contextual and experiential approach that has the potential to advance understandings of how the lives of individuals and practices interact.

Adopting a social practice perspective reframes how life-course dynamics in mobility practices can be conceptualised and approached. In this article, a discussion of the different applications of the concept of practice and career to the study of mobility biographies offers interesting possibilities for broadening the scope of conceptual and empirical inquiries into practice biographies. In considering the key challenges of representing multiple scales and temporalities that characterise a practice career, this article revealed how approaches which combine and build upon insights from both SPT and biographical and life-course studies offer a largely untapped body of conceptual and methodological tools. These could be fruitfully deployed in future research to capture, represent and understand mobility biographies in ways that complement other recent theoretical and practical innovations in this rapidly evolving research field.

Acknowledgements

The authors wish to express their thanks to all participants who were involved in this research, which was conducted as part of the CONSENSUS#2 Project: a cross border household analysis of consumption, environment and sustainability (http://www.consensus.ie), funded by the Environmental Protection Agency (EPA) Science, Technology, Research and Innovation for the Environment (STRIVE) Programme 2007–2013.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The authors wish to acknowledge research funding from the Irish Research Council for the Humanities and Social Sciences.

Notes

- 1. While many varieties of practice theory exist ('there is no unified practice approach' (Schatzki, 2001: 2)), some important points of convergence among practice theories can be explicated (cf. Reckwitz, 2002). In the context of achieving the aim of this article to introduce a practice approach to mobility biographies, an abridged discussion of practice theories is presented. As such, the term Social Practice Theory, and more specifically its abbreviation 'SPT', is employed throughout the article.
- 2. See Warde and Southerton (2012) and Southerton (2013) for a critique of the social-psychological, stimulus—response approach to habit in the context of consumption.
- 3. Schatzki distinguishes integrated practices from dispersed practice. 'Dispersed practices' are distinct actions that appear in many different realms of everyday life and encompass both linguistic ('sayings') and practical ('doings') actions, examples being explaining, describing, imagining, following rules but also acts such as turning on a switch. Integrative practices, however, are 'the more complex practices found in and constitutive of particular domains of social life' (Schatzki, 1996: 98). Examples include travel practices, cooking practices, farming practices and business practices. Integrative practices join multiple dispersed practices, projects, ends and emotions (Schatzki, 2002: 88). In this respect, mobility, conceptualised in a broad and fundamental sense, can be understood as a dispersed practice in that it is constitutive of many, if not all, practices (cf. Hui, 2013). The practice of car driving, however, constitutes an integrated practice that consists of number of different action and projects each consisting of a range of possible doings and sayings, like deciding where to go, getting into the car, turning on the ignition, fastening seatbelts, looking in mirrors, indicating, following and interpreting road signs and symbols, responding to the behaviour of other drivers, and so on. Importantly, Integrative practices constitute the frameworks around which consumption in various domains of social life becomes organised. As such, Warde (2005) proposes that they should form the focus of consumption research. This article focuses on the integrated practice of car driving.
- 4. It is noteworthy that more recent practice approaches to consumption research have been critiqued for their conceptualisation and treatment of individual subjectivity and agency in change processes (cf. Greene and Westerhoff, 2014; Groves et al., in press; Piscicelli et al., 2015; Spaargaren, 2013). The dominant approach for analysing dynamics has been from the perspective of the life of the practice itself. Yet, how exactly the agency of subjects themselves is linked to practices is an important question that requires theoretically and empirically rigorous answers (Groves et al. in press, cf. also Archer, 2000 and Spurling, 2010). In this respect, a focus on the life course of practitioners emerges as an important perspective of analysis that has yet to be fully explored. Combining life-course and practice approaches to study biographic dynamics in practice may offer a fruitful means of rehabilitating a focus on human agency and subjectivity in practice studies in this regard.
- 5. See Shove and Panztar (2007) and Spurling (2010) for noteworthy practice studies that highlight aspects of biography within practice theory in a way that emphasises individual difference and agency.

- 6. Hui and Spurling point out that existing work concerning consumption dynamics tend to treat either individuals or practices as stuck in a series of synchronic instances. That is, 'where practices are recognised as changing across time, individual enactments are addressed in terms of isolated moments of performance. Conversely, when individuals' lives are examined in their diachronic unfolding, practices are reified as unchanging entities' (Hui and Spurling, 2013: 11). Following this there has been a paucity of work that has focused on how the lives of practices and individuals interact over time.
- 7. In explicating this concept, Hui and Spurling (2013) note, 'At the same time that multiple careers are concurrently emerging within individual lives, they are also emerging within practices' (p. 9). That is, one could recognise that 'practices are made up not only of elements, but also of careers'. In this respect, a practice can be conceptualised as constituted by 'a range of stages and "types" of careers'. Shove et al. (2012) also highlight this perspective: 'at any one moment, a practice will be populated and carried by people with different degrees of experience and commitment' (p. 71).
- 8. In investigating wider contextual changes, individual's biographic accounts were analysed for canonical narratives and traces of the wider shifts in practice that occurred as individual's moved through their career in practice (cf. Spurling, 2010 for another account of such a 'traces of policy' approach). However, in recognition that individual narratives alone cannot account for changes in the dynamics of practice at macro scales, this was combined with secondary analysis of policy, historical and social contexts of mobility practice in Ireland.
- 9. Pseudonyms are used to protect participants' anonymity.
- 10. Pred (1981) conceptualises the biography of an individual at two scales of analysis the 'daily path' and the 'life path'. The daily path refers to the activities, events and actions that take the individual through the time-space of their daily life, whereas the life path refers to longer term patterns of activities and transitions that occur over their life course.

References

Anderson B (2014) Tracking social practices with big(ish) data. *Paper presented at the practices, the built environment and sustainability researchers workshop*, Cambridge, 26–27 June.

Archer MS (2000) Being Human: The Problem of Agency. Cambridge: Cambridge University Press.

Axhausen KW (2008) Social networks, mobility biographies, and travel: Survey challenges. *Environment and Planning B: Planning and Design* 35: 981–996.

Barr S and Prillwitz J (2014) A smarter choice? Exploring the behaviour change agenda for environmentally sustainable mobility. *Environment and Planning C: Government and Policy* 32: 1–19.

Blue S, Greene M and Morosanu R (2014) Time and practice. In: Foulds C and Jensen CL (eds) *Practices, the Built Environment & Sustainability – A Thinking Note Collection*. Cambridge; Copenhagen; London: GSI, DIST, BSA CCSG.

Bourdieu P (1977) *Outline of a Theory of Practice*. Cambridge: Cambridge University Press. Browne AL (2015) Can people talk together about their practices? Focus groups, humour and the sensitive dynamics of everyday life. *Area*. Epub ahead of print 7 December. DOI: 10.1111/area.12250.

Butler C, Parkhill KA, Shirani F, et al. (2014) Examining the dynamics of energy demand through a biographical lens. *Nature and Culture* 9: 164–182.

- Cairns S, Harmer C, Hopkin J, et al. (2014) Sociological perspectives on travel and mobilities: A review. *Transportation Research Part A: Policy and Practice* 63: 107–117.
- Cass N and Faulconbridge J (2016) Commuting practices: New insights into modal shift from theories of social practice. *Transport Policy* 45: 1–14.
- Chamberlayne P, Bornat J and Wengraf T (2000) Turn to Biographical Methods in Social Science: Comparative Issues and Examples. London: Routledge.
- Chatterjee K, Sherwin H and Jain J (2013) Triggers for changes in cycling: The role of life events and modifications to the external environment. *Journal of Transport Geography* 30: 183–193.
- Clark B, Chatterjee K, Melia S, et al. (2014) Life events and travel behavior. *Transportation Research Record* 54–64.
- Giddens A (1984) The Constitution of Society: Outline of the Theory of Structuration. Cambridge: The Polity Press.
- Greene M and Westerhoff L (2014) Exploring the relationship between narrative and social practice. In: Foulds C and Jensen CL (eds) *Practices, the Built Environment & Sustainability A Thinking Note Collection*. Cambridge, Copenhagen, London: GSI, DIST, BSA CCSG, pp. 10–13.
- Groves C, Henwood K, Shirani F, et al. (2016) Invested in unsustainability? On the psychosocial patterning of engagement in practices. *Environmental Values* 25.
- Hards S (2011) Careers of Action on Climate Change: The Evolution of Practices Throughout the Life-Course. York: Social Policy and Social Work, University of York.
- Hards S (2012) Tales of transformation: The potential of a narrative approach to proenvironmental practices. *Geoforum* 43: 760–771.
- Heisserer B (2013) Curbing the Consumption of Distance? A Practice-Theoretical Investigation of an Employer-Based Mobility Management Initiative to Promote more Sustainable Commuting. Galway: School of Political Science and Sociology, National University of Ireland Galway (NUI Galway).
- Heisserer B and Rau H (2015) Capturing the consumption of distance? A practice-theoretical investigation of everyday travel. *Journal of Consumer Culture*. Epub ahead of print 23 September. DOI: 10.1177/1469540515602304.
- Henwood K, Pidgeon N, Groves C, et al. (2015) *Energy Biographies Research Report*. http://energybiographies.org: Cardiff University.
- Hitchings R (2011) People can talk about their practices. Area 44: 61–67.
- Hjorthol RJ, Levin L and Sirén A (2010) Mobility in different generations of older persons: The development of daily travel in different cohorts in Denmark, Norway and Sweden. *Journal of Transport Geography* 18: 624–633.
- Howell RA (2013) Are graphical representations of practices over an individual's lifecourse a useful methodological tool in researching the impact of lifecourse transitions on sustainability? Paper presented at Royal Geographical Society Annual Conference session 'Researching Practices for Sustainability: Exploring new (and old) methodological frontiers', London, 27–30 August 2014.
- Hui A. (2013) Moving with practices: The discontinuous, rhythmic and material mobilities of leisure. *Social and Cultural Geography* 14: 888–908.
- Jaeger-Erben M (2013) Everyday life in transition: Biographical research and sustainability. In: Fahy F and Rau H (eds) *Methods of Sustainability Research in the Social Sciences*. London: Sage.

- Jones H, Chatterjee K and Gray S (2014) A biographical approach to studying individual change and continuity in walking and cycling over the life course. *Journal of Transport & Health* 1: 182–189.
- Lanzendorf M (2003) Mobility biographies: A new perspective for understanding travel behavior. In: 10th international conference on travel behaviour research, Lucerne, 10–15 August 2003.
- Lanzendorf M (2010) Key events and their effect on mobility biographies: The case of childbirth. *International Journal of Sustainable Transportation* 4: 272–292.
- McDonald F and Nix J (2005) Chaos at the crossroads. Kinsale, Cork: Gandon Books.
- Müggenburg H, Busch-Geertsema A and Lanzendorf M (2015) Mobility biographies: A review of achievements and challenges of the mobility biographies approach and a framework for further research. *Journal of Transport Geography* 46: 151–163.
- Nicolini D (2009) Zooming in and out: Studying practices by switching theoretical lenses and trailing connections. *Organization Studies* 30: 1391–1418.
- O'Connell S (1998) The Car in British Society: Class, Gender and Motoring, 1896–1939. Manchester: Manchester University Press.
- Piscicelli L, Cooper T and Fischer T (2015) The role of values in collaborative consumption: Insights from a product-service system for lending and borrowing in the UK. *Journal of Cleaner Production* 97: 21–29.
- Pred A (1981) Social reproduction and the time-geography of everyday life. *Geografiska Annaler: Series B, Human Geography* 63: 5–22.
- Rau H and Edmondson R (2013) Time and sustainability. In: Fahy F and Rau H (eds) *Methods of Sustainability Research in the Social Sciences*. London: Sage, pp. 173–190.
- Rau H and Manton R (2015) Life events and mobility milestones: Advances in mobility theory and research. *Journal of Transport Geography (Under review)*.
- Rau H, Davies AR and Fahy F (2014) Moving on Promising pathways to more sustainable futures. In: Davies A, Fahy F and Rau H (eds) *Challenging Consumption: Pathways to a More Sustainable Future*. New York; Oxon: Routledge, pp. 187–205.
- Rau H and Manton R (2016) Life events and mobility milestones: Advances in mobility biography theory and research. *Journal of Transport Geography* 52: 51–60. DOI: 10.1016/j.jtrangeo.2016.02.010.
- Reckwitz A (2002) Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory* 5: 243–263.
- Røpke I (2009) Theories of practice New inspiration for ecological economic studies on consumption. *Ecological Economics* 68: 2490–2497.
- Schäfer M, Jaeger-Erben M and Bamberg S (2012) Life events as windows of opportunity for changing towards sustainable consumption patterns? *Journal of Consumer Policy* 35: 65–84.
- Schatzki T (2001) Introduction: Practice theory. In: Schatzki T, Knorr Centina K and Von Savigny E (eds) *The Practice Turn in Contemporary Theory*. London and New York: Routledge, pp. 1–14.
- Schatzki TR (1996) Social Practices: A Wittgensteinian Approach to Human Activity and the Social. Cambridge: Cambridge University Press.
- Scheiner J (2007) Mobility biographies: Elements of a biographical theory of travel demand. *Erdkunde* 61: 161–173.
- Scheiner J (2014) Gendered key events in the life course: Effects on changes in travel mode choice over time. *Journal of Transport Geography* 37: 47–60.

Scheiner J and Holz-Rau C (2013a) A comprehensive study of life course, cohort, and period effects on changes in travel mode use. *Transportation Research Part A: Policy and Practice* 47: 167–181.

- Scheiner J and Holz-Rau C (2013b) Changes in travel mode use after residential relocation: A contribution to mobility biographies. *Transportation* 40: 431–458.
- Scheiner J and Holz-Rau C (2015) Räumliche Mobilität und Lebenslauf Studien zu Mobilitätsbiografien und Mobilitätssozialisation. Wiesbaden: Springer.
- Schoenduwe R, Mueller MG, Peters A, et al. (2015) Analysing mobility biographies with the life course calendar: A retrospective survey methodology for longitudinal data collection. *Journal of Transport Geography* 42: 98–109.
- Shove E and Pantzar M (2007) Recruitment and reproduction: The careers and carriers of digital photography and floorball. *Human Affairs* 17: 154–167.
- Shove E, Pantzar M and Watson M (2012) The Dynamics of Social Practice: Everyday Life and How It Changes. London: Sage.
- Shove E, Watson M and Spurling N (2015) Conceptualizing connections: Energy demand, infrastructures and social practices. *European Journal of Social Theory* 18: 274–287.
- Southerton D (2009) Re-ordering temporal rhythms: Coordinating daily practices in the UK in 1937 and 2000. In: Shove E, Trentmann F and Wilk R (eds) *Time, Consumption and Everyday Life. Practice, Materiality and Culture*. Oxford: Berg, pp. 49–63.
- Southerton D (2013) Habits, routines and temporalities of consumption: From individual behaviours to the reproduction of everyday practices. *Time & Society* 22: 335–355.
- Spaargaren G (2003) Sustainable consumption: A theoretical and environmental policy perspective. *Society & Natural Resources* 16: 687–701.
- Spaargaren G (2013) The cultural dimension of sustainable consumption practices: An exploration in theory and policy. In: Cohen MJ, Brown G and Vergragt PJ (eds) *Innovations in Sustainable Consumption: New Economics, Socio-Technical Transitions and Social Practices.* Cheltenham: Edward Elgar, pp. 229–251.
- Spurling N (2010) Authors of Our Own Lives? Individuals, Institutions and the Everyday Practice of Sociology. Lancaster: Department of Sociology, Lancaster University.
- Spurling N and Blue S (2014) Entities, performances and interventions. In: Foulds C and Jensen CL (eds) *Practices, the Built Environment & Sustainability A Thinking Note Collection*. Cambridge; Copenhagen; London: GSI, DIST, BSA CCSG, pp. 4–7.
- Verplanken B, Walker I, Davis A, et al. (2008) Context change and travel mode choice: Combining the habit discontinuity and self-activation hypotheses. *Journal of Environmental Psychology* 28: 121–127.
- Warde A (2005) Consumption and theories of practice. *Journal of Consumer Culture* 5: 131–153. Warde A and Southerton D (2012) Introduction. In: Warde A and Southerton D (eds) *The Habits of Consumption*. Helsinki: Open Access Book, pp. 1–25.
- Watson M (2012) How theories of practice can inform transition to a decarbonised transport system. *Journal of Transport Geography* 24: 488–496.
- Witzel A and Reiter H (2012) The Problem-Centred Interview. London: Sage.

Author Biographies

Mary Greene is a PhD researcher at the School of Geography and Archaeology and the Institute for Lifecourse & Society (ILAS) at the National University of Ireland,

Galway (NUI Galway). Her current research interests focus on understanding everyday practices and their dynamics over time and space. Her PhD study seeks to situate these dynamics biographically to explore how practices change over peoples life courses within a changing Irish society.

Henrike Rau holds the W2 Professorship in Social Geography and Sustainability Research at Ludwig-Maximilians-University Munich (LMU). She specialises in environmental sociology and social-scientific and interdisciplinary sustainability research, focusing on consumption and mobility. She currently leads research on consumption, mobility and the life course. Her publication track record includes 'Methods of Sustainability Research in the Social Sciences' (Sage, 2013) and 'Challenging Consumption' (Routledge, 2014) as well as more than 30 peer-reviewed articles and book chapters.