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# Exploring the everyday energyscapes of rural dwellers in Wales: Putting relational space to work in research on everyday energy use

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## Abstract

Rural dwellers face a series of considerable, inter-locking challenges in the coming transition to a low-carbon society. As the highest emitters of domestic carbon per head of capita in Britain, understanding how and why rural households use energy in the ways that they do, and how this changes through time, is critical to gaining an insight into the ways in which we might reduce domestic energy demand.

Although a plethora of conceptual approaches exists for enriching our understanding of the social drivers of energy use and demand, it is also important to better elucidate processes that give form to lives as lived in relational rural spaces. The article deploys complementary concepts of biography, practice and lived relational space, utilises them as part of a bespoke methodology for studying extended case narratives, and reports original analyses of more nuanced understandings of sense-making about dynamic changes in life processes and lived spaces. Insights are offered into difficult to resolve narrative tensions arising when expectations, uncertainties, aspirations and imaginaries work in a relational way to frame energy use in the present, and when socio-cultural ideals and identity-forming processes manifest in rural dwellers' energyscapes are involved in the making of the future present.

## Keywords

- Everyday energyscapes;
- Energy use;
- Rural;
- Narrative

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## 1. Introduction

As the highest emitters of domestic $CO_2$ per head of capita in Britain [1], rural dwellers face a series of considerable, inter-locking challenges in the coming transition to a low-carbon society. This 'distinct carbon emissions geography' [2] has been attributed to the legacy of an ageing and inefficient housing stock, the retraction of local services in favour of more centralised service provision, higher rates of car ownership and use, and the limited distribution of the gas network in rural areas [3]. This potent combination could affect the degree to which rural dwellers are willing to recognise, and accept the need for change, and indeed, whether they feel able to change at all. Indeed, it is important to remember that structural disadvantage can be exacerbated by personal circumstances [4], which vary across the life-course and which differ from household to household. Moreover, prevailing popular imaginaries of rurality – in which the countryside is regarded as a desirable and idyllic place to live – could play a significant role in whether rural dwellers are likely to undertake any 'transitional activities' to address these challenges [5].

There is a plethora of ways of conceptualising human action – and domestic energy consumption –within the social sciences. These can be categorised into three broad perspectives, which are cognitive, contextual and practice-based[1]. Our paper takes a practice-based understanding of the dynamics of everyday energy use, as its strength lies in the insights it provides into the social drivers of domestic energy consumption. However, while a practice perspective reveals much about the social dynamics of energy consumption, geography – that is the where of social practice – is rarely taken into account. Indeed, when it comes to rural household energy consumption little attention has been paid to the personal circumstances, nor the everyday lives of rural households; whether their forms of dwelling, time geographies and cultural practices have any implications for the coming transition to a low-carbon society [6]. It is this concern that forms the foundation of this paper.

A detailed understanding of rural dwellers' everyday energyscapes is of great value to both the UK and devolved governments, given that a significant minority – 18% – of the British population reside in the countryside. In Wales, the proportion of rural dwellers rises considerably to 33.9%, which accounts for just over a million people; with one in every eight living in the sparsest context [7]. An understanding of the everyday lives of these people – as the highest domestic carbon emitters in Britain – is thus integral if Wales is to successfully reach its carbon reduction

[1] For an in-depth review of this vast body of literature, see [65] & [66].

targets and contribute to the collective effort to transition to a low-carbon, secure and equitable energy system.

In this article, we draw upon relational thinking within geography and the wider social sciences to analyse the case-narratives of two very different individuals living in rural north-west Wales. In doing so, we wish to highlight how relationships in lived spaces are involved in the making of the future, by shaping everyday energy investments – both financial and emotional – in the present. By drawing on the complementary concepts of biography, practice and relational space, we understand energy use as something evolving out of dynamic relations between people, objects and places. As such, this paper explores how everyday energy practices are part of life processes that are context dependent, dynamic and always under construction. In the next section, we lay out the conceptual foundations of our integrated approach to understanding the relationships between biography, practice and taskscape- which we use in our analysis to put relational space to work before moving on to briefly discuss the research context and methodological approach that we adopted.

## 2. Theoretical underpinnings for exploring the everyday energyscapes of rural dwellers

Understanding everyday energy consumption requires attending to the complex, multi-layered, and uneven processes that shape the development of various energy-consuming practices as well as the socio-technical systems upon which they rely. A practice-based perspective is a widely used theoretical approach for elucidating such systemic processes, as it highlights the existence of constraints that can limit how far individuals are able to change their own lives [8]. However, while structural constraints often limit what individuals are able to do or achieve, it does not necessarily mean that people are rendered helpless. Individuals often improvise and adapt to the conditions in which they find themselves, and in times of great personal change such as those encountered during life-course transitions, this can result in significant shifts in identity and its accompanying relational dynamics [9]; [10]; [11]; [12]; [13].

The study from which this paper has developed is connected to the wider Energy Biographies project at Cardiff University. Drawing upon a particular informative framework to capture more relational processes of embedding and entanglement [11] ; [14], it brings together a biographical approach that is capable of engaging with questions of subjectivity [15] with an understanding of sociotechnical processes informed by practice theory. This framework helps to better understand

continuity and change in terms of energy practices, not only at the societal level, but over individual lifetimes as well. Like the wider study, we have adopted a narrative way of conceptualising biography that brings into view the means by which identities and values are formed. In this sense, biography is not simply a pre- given, but rather is understood to be a process that is always in the making. This notion of biography brings with it the implication that our personal and collective identities are not predetermined or fixed, but as emerging in relationships with others (i.e. people and objects) through time and in place: we are therefore relational subjects [16]. Our relational approach to understanding everyday energy consumption thus not only recognises biography and practice, but also understands them as being emplaced.

Biographical or life-course approaches explore the interplay of personal dynamics and wider social and structural forces that reach backwards as well as forwards in time [17]. Such a perspective provides us with a platform to further develop an understanding of the dynamic relationship between individual and collective lives (*e.g.* networks of family and friends), as well as broader patterns of social change [18]. The strength of this approach is that it allows researchers to explore and understand the dynamics of change in specific spatio-temporal contexts.

Within life-course theorising, the concept of 'linked lives' [19] allows us to explore the interdependencies between ourselves and others that unfold across space and time. Individuals and practices form a part of wider relational webs that span within as well as beyond the home. Our lives intersect and overlap with one another, and it is often only through positioning ourselves in relation to others that many of our practices can become apparent. As such, agency and identity should be understood relationally, which is often only possible to identify through a focus on our extended personal narratives [20]. Exploring how we change as a result of these relationships is thus a central concern for this study.

Relational theories of place and space reinforce how a life-course approach promotes understanding of how the lives of individuals are shaped by the historical and spatial contexts in which they find themselves. The reciprocal relation between the individual and the social as evident within both practice theory and life-course studies is one that is also shared by theories of place [21]; [22] ; [23]. In this line of thinking, places are not understood as bounded containers of everyday life; rather, they are 'a constellation of processes' [21; 141] that are always in the making. Such a view of place thus promotes further thought on the ways in which local interactions,

individual perceptions and embodied experiences are implicated in the constitution of lived spaces [23].

Another important set of conceptual insights are conveyed by the notion of 'Taskscape' [24] ; [25], which offers us a grounded, processual way of conceptualising the relationship between people and place. Ingold defines Taskscape as 'an array of related activities' (2000; 195), and stressing the emergent nature of our lives, argues that life processes form the 'landscapes in which people have lived' (p. 189). As such, Taskscapes – from the micro-geographies of the home to places further afield – are part and parcel of dynamic change processes, as these lived spaces are always under construction.

In bringing these complementary relational insights together, we understand the concept of *everyday energyscape* to encapsulate an assortment of related energy consuming activities (i.e. practices) that are spatially and temporally distributed, giving form to the lived realities of individuals. We use the term *everyday energyscape* to inform the grounded study of energy consumption in a multi-scalar way: for the purposes of analysis, researchers can focus in on energy consuming activities at the micro-scale of a single room or an entire house, to a locality (meso), and beyond to the national/international scale (macro). While an *everyday energyscape*, like the notion of Taskscape [24] ; [25], is a 'socially constructed space of human activity', for the purposes of analysis, it can be examined within spatial boundaries and delimitations [26: 2]. In this paper, we highlight the home as a relational space that leads us to explore practices beyond its boundaries, such as those related to transport for work and leisure, which in turn impacts the practices that take place within the home.

Our focus on assortments of related activities that are enabled by socio-technical systems serves to highlight the co-construction of *everyday energyscapes* and the spaces and places in which they are embedded. *Everyday energyscapes* are thus heterogeneous in that the available meanings (cultural conventions, expectations and socially shared meanings, e.g. idealised forms of living), materials (infrastructures, objects and tools) and skills (knowledge and embodied skills) that constitute them vary according to context – both spatially and temporally [8]. The notion offers a means of accounting for broader processes of social change, in addition to change over the life-course, as these bundles of related activities are affected by the events and roles that we encounter as we live out our lives. The central concern of *everyday energyscapes* is thus with the relationships that people

make in the lived spaces of their everyday lives through the 'doing' of practice. As such, the notion allows us to engage with everyday energy consumption in a grounded and relational way.

## 3. Research context and method

This paper is based on in-depth narrative interview data collected in the county of Gwynedd between November 2012 and October 2013 as part of an ESRC-funded research project that sought to explore the ways in which rural households engage with energy in their everyday lives. Situated in north-west Wales, Gwynedd is one of nine rural authorities in Wales, with a population density of 48.5 persons per square kilometre; well below the Welsh average of 140 [27] ; [28]. While using this measure of rurality provides a useful starting point, it is important to bear in mind that such a measure hides a wide variety of different types of rural areas; ranging from smaller settlements close to cities and towns to isolated villages and hamlets, to remote, largely unpopulated areas [29].

The research sought to take advantage of this diversity as a means of gaining valuable insights into the ways in which different rural settlement types feature in shaping household energy demand. As such, the research team purposefully selected a small number (eleven in all) of information-rich household-cases, varying in composition and circumstance, including where they lived; ranging from isolated farmhouses to hamlets and from villages to small towns.

Our methodological interest lies in a central tenet of narrative inquiry: the belief that people give meaning to their lives through the stories they tell. For some, storytelling is understood as a 'natural way of recounting experience' for ourselves as well as for others [30]. Our interest in narrative inquiry is conveyed by three key features, which make it particularly fitting to our research. First, is the way that people organise their lived experiences into stories; narratives thus have a temporal dimension. Second, narratives are inherently social, given that told stories not only depend upon the teller's values and experience (both past and present), but also upon the audience for whom the story is being told. Third, narratives are situated and context dependent, as stories are shaped by the social, cultural, historic and geographical settings in which they are located. A narrative approach thus enables us to 'see different and sometimes contradictory layers of meaning, to bring them into dialogue with one another, and to understand the interplay between individual subjectivity and the dynamics of social change' [15; 5].

Given that an understanding of people as relational subjects living interdependent lives underpins this research, household members were interviewed both together and apart[2], with each interview lasting between 1 and 2 hours. Individual narrative interviews took place in participants' homes between late November 2012 and early February 2013, and were designed to cover a wide range of topics that related to experiences of energy consumption. Interviews were divided into three consecutive parts; the first focusing on the past (participants' background and community connections), the second focusing on the present (household routines and how they might change, similarities and differences with significant others within and beyond the home), and the third focusing on the future (how participants anticipated their lives might change in 5–10 years). The second round of interviews took place approximately six months following the first, in late summer 2013, and involved interviewing the household together as a group. Household interviews were also divided into three parts: the first focusing on any changes that had happened in the period between interviews; the second involved asking households to reflect on the tentative themes drawn from the first round of interviews; and the third involved a creative task in which households were invited to devise a set of energy rules[3] for their home.

Interviewing households together and apart was viewed as a means of exploring the interweaving of presently linked lives and how such relationships shape everyday energy consumption in the domestic sphere. This meant that we had the opportunity to consider whole households as well as separate individuals as cases. To analyse the data, we drew upon techniques used in qualitative longitudinal research [31]; [32] ; [33] for studying biographical data to create case histories for investigating individual and collective narratives of biographical change and its implications in terms of energy consumption.

Individual case narratives were constructed by using what Saldaña [34] has termed 'through lines', which 'describe, connects, and summarizes the researcher's primary observations of participant change' (p. 151). In taking decisions as to which through lines to follow, we focused, as did Butler et al. [31], on aspects of the person's narrative relating to 'that which they identified as sustainable and unsustainable practices within their lives', which help 'open up thinking about how and why particular paths are followed, while others are not' (p. 173).

[2] Where possible and appropriate.

[3] The 'Energy Rules' poster was developed by the Energy and Co-designing Communities team at Goldsmiths University [67].

This article presents the case narratives of two participants. The case narratives were chosen due to the unique insights that they bring in understanding change over time that influence socio-spatially embedded consumption trajectories. Each participant was subject to very different circumstances and were at different stages of the life-course, which, as will be evident over the course of the analysis, influenced the topics discussed during their respective interviews.

## 4. Analysis

### 4.1. Alys: settling back

Alys is in her mid-thirties and lives with her husband and two young children in a small hamlet in the Llŷn Peninsula. Alys and her husband both come from nearby villages in the region, and have only ever made short-distance moves in and around Pen Llŷn. Prior to living at their current house, the couple had settled in a market town by the sea, twelve miles from their current home. Whilst they enjoyed living in their terraced house, the couple were always eager to move back to the area. When asked to reflect on how and why she wanted to return, Alys constructed a personal narrative that centred upon her personal rootedness in the locality.

> *"I grew up on a farm nearby, attended the local [primary] school and received my education in the medium of Welsh. I then went on to the local secondary school and college before going to university […] so in terms of when I was growing up – obviously we're in a rural area- that's important to me – family's important- so staying in the locality has always been the priority for me rather than following any particular career."*

Here we can see that Alys' narrative is fundamentally about identity as she emphasises her strong attachments to family, community and place; conveying what was important to her in relation to where she aspired to live. Clearly, her narrative 'performs personal and social/cultural identity work' [20; 165] that creates a biographical continuity, which Alys uses to legitimise her residential aspirations to return.

It wasn't until they had their eldest child in 2005 that the couple began looking for a home in earnest. Being close to their network of family and friends was deemed "*incredibly important*" by Alys, particularly given that she and Dylan were establishing their own family. Alys emphasised the benefits of returning particularly with reference to her children by drawing on the proximity to grandparents, aunts, uncles and cousins, belonging to a "*Welsh [speaking] community*", and the "*quality of local schools – again in the medium of Welsh*", as key points to support her view that she had

chosen a good place to raise a family. While Alys had always planned to return to her home region, it is clear that her transition to parenthood added another layer of complexity to her return narrative. Indeed, her reasons for return now had an additional dimension that encompassed her children's educational needs, as well as being in close geographical proximity to their familial networks. However, while the couple were eager to return to their home community, house prices in their preferred area proved to be unaffordable;

> *"Unfortunately, house prices were ridiculous. We never would have been able to afford to buy a house of this size. This house belongs to my family you see, my parents had been renting it out to holidaymakers and for short-term leases. So when tenants were moving out and the house became empty it was offered to us, so we took our chance and moved in."*

Alys' continual references to her relationships with other people have featured strongly throughout her narrative of return, which draw our attention to social expectations associated with intergenerational commitments between parents, children and grandparents, as well as context, i.e. local housing markets and how they constrain and/or enable particular trajectories (*see* Ni Laoire [35]). Indeed, as illustrated by the above extract, had it not been for Alys' parents' intervention, the couple's residential trajectory would have taken a markedly different path.

Whilst Alys' first concern was being close to her social networks, she also acknowledged that doing so incurred a cost in both time and money. The location of their new home meant that the family had to travel considerable distances every day. Alys' work travel pattern in particular often exceeds fifty miles a day, and in order to gain access to childcare services and leisure activities for the children, the family must travel twelve miles to get to the nearest market town. As she and her husband are both in full-time employment, Alys deems it necessary for them to each have a car, the running and maintenance of which takes "*a large chunk*" out of the couple's earnings.

> *"[…] going back to thinking about applying for work, people that are from Pen Llŷn have the attitude that […] if you want to stay you have to be prepared to travel quite a bit every day, but that's the price I'm willing to pay to stay here. That's more important to me than a salary or a career."*

From the above extract it is possible to see links between the social, structural and institutional dimensions that have combined to influence Alys' transport practices. Clearly, rural housing and labour markets combine to create the conditions that make it necessary for the labour force to be

more mobile (*see* [36] ; [68]). The growth of car ownership during the latter half of the twentieth century encouraged new journeys to be made that were previously not possible in a system of public mobility [37], which meant that people ventured further from their places of residence than ever before. In rural places, the consequent weakening of geographical ties between residences and workplaces meant that long-distance commuting became a viable alternative to out-migration [38] ; [39]. Moreover, due to the consequent geographical dispersion between homes and workplaces other modes of transport, such as walking and cycling, are often considered unviable do to the distances between destinations, and in some cases topographies encountered, and the limited infrastructures in place – such as pavements and cycle lanes on narrow, winding roads – for travelling safely [40]. Institutional investments in road infrastructure, low population densities spread over considerable distances, and the comparatively low cost of motoring in relation to public transport fares have thus resulted in the car being the dominant mode of transportation (*see* Gray et al.[41]).

Indeed, Alys' contention that "*we have to have two cars*" alludes to the powerful position that the car has obtained within rural areas in particular. Undoubtedly, the perceived advantages of speed, cost, control, and convenience associated with personal transportation make car ownership an attractive prospect that offers freedom and independence to those in areas where public transport services are limited. These factors combine, making it difficult for Alys to consider alternative modes of transport as she is 'constrained by [her] perception of what is possible or reasonable to expect' [42]. Indeed, instead of considering alternative modes of transportation for some of her journeys, Alys adopts a different strategy by "*think[ing] twice before getting in the car*". Here, she emphasises the importance of taking the time to find alternative strategies to making wasteful journeys, which according to Alys is something that her husband has yet to have learned;

> *"Dylan's more likely to jump in the car whereas I'm more likely to think of ways to avoid going [to town] today or something. Dylan does this on a regular basis, where he comes back [from town] and then remembers that he needs something else, and so he'll just go and get it instead of trying to think first."*

Aside from her journeys to work and back, we can see that Alys is rather mindful about how often she uses the car. Her concern may be linked to her prior comment regarding the temporal and financial resources needed to keep two cars running, thus making multi- purpose journeys a more efficient use of resources. Alys believes that her attitudes were influenced in part by her mother,

who lives and works on a farm, and "*won't just pop into town. She has to have more than one reason to go*". Here we can see a form of intergenerational continuity within Alys' family in relation with values of not being wasteful (*see* Shirani et al. [43]), rendering single-purpose journeys as an excessive use of time, effort and money (see also [14] ; [44] for further discussions of waste as a complex, relational issue). However, Alys also acknowledges generational differences in relation to practice, as she states that she is of a generation that is "*used to driving for work, so if you want to go [anywhere] you have to go in a car so you accept it*".

Thus far, we have traced the matters of concern that have influenced Alys' return to her home region, and have explored her reflections regarding the effects that her residential move had in relation to her daily mobilities. In doing so, we have considered the personal, social, and structural dimensions that made the move possible and explored how these influence what constitutes as 'normal' rural travel practices. The discussion now turns to the previously mentioned competing demands of work and family life, as they play a key role in temporally organising household consumption practices creating everyday energy dependencies within the home.

Alys describes her life as "*literally being in a routine*", as having a routine was viewed as important for the children, whilst also serving as a practical way to "*help get the day started*". What quickly became evident as Alys recounted her typical workday routine was that the television viewing had become an integral part in getting things done in the morning.

> *"We have a little someone who gets up very early – our daughter wakes up at six o'clock every morning- so she knows that she can come downstairs and watch television until Dylan and I get up around 6.30. Also, because there's a bit of a rush in the mornings given that we both work full time – maybe it's for the wrong reasons- and especially now with 'Cyw'[4]; on S4C [laughs] (…) But you can get one of [the children] ready for school, and then send them in front of the telly while you get the other one ready –and I know it's completely wrong and goes against everything [laughs]- but it does help structure the mornings."*

Whilst the contribution of information and communication technologies (ICT) such as televisions, laptops and computers, to the total energy consumption within the domestic sphere has been relatively low in the past, it share is rising fast [45] ; [46]. Electrical demand now accounts for 18%

[4] Welsh for 'chick' – a television block for children aged 3–6 on S4C (Channel 4 Wales).

of total energy use in the residential sector [47], and this upward trend is largely owed to rising levels of disposable income, which has resulted in a significant growth in the ownership of ICT and appliances since the 1970s [48]. Drawing parallels with the work of Evans et al. [49], we can see in the excerpt above that watching the television plays a functional role in regulating the young family's routines. Of particular interest is how Alys utilised the television to keep her children occupied while she could dedicate her attention to other tasks, such preparing food, doing the laundry, having her daily shower, and getting the family ready for school and work. This also resonates with the work of Götz et al. [50] who have suggested that such practices may be due to parental perceptions that paint television viewing as a safe activity for children, allowing parents to dedicate themselves to other household tasks. It has been posited elsewhere that such arrangements regarding household television use can be linked to whether parents perceive time as a resource that is plentiful or scarce [51] ; [49].

Also evident in Alys' narrative is a reflexive awareness of moral pressures associated with constructs of 'good' parenting (*see* Shirani et al. [52]), which view children's prolonged exposure to television as a risk to children's development and wellbeing. When talking about her use of the TV as a tool to keep her children occupied, Alys alludes to a belief that, as a parent, she is behaving unwisely (*see* Butler [53]), as watching television is not viewed as an ideal activity for her children. Moreover, Alys demonstrates a concern with the amount of time that her eldest child spends watching television as it is "*switched on quite early in the morning, and in the evenings and weekends too*". Whilst the family did not have any specific rules regarding their children's screen time, Alys found a way of curtailing their television use by only having one television in the house.

> *"We decided that we would only have a television in the parlour. We deliberately don't have a television in the kitchen so that it doesn't distract anyone during dinner. So that was a deliberate decision that we made, that we don't have a television in the kitchen nor in the bedrooms either."*

Here we can see that the placement of the television reveals much about the relationship between people and the spaces they occupy [54]. Whilst Alys deems the presence of the television in the public space of the living room to be helpful to organising and accomplishing everyday family life, its placement elsewhere is seen as disruptive.

Once again, we can see the influence of wider discourses regarding the negative effects of media on children and on family unity (*see* Livingstone [55]), reflected in the limitation and spatial

arrangement of technologies within Alys' home. As such, Alys' story seems to support the contention that the acquisition and use of technologies (and thus the related energy consumption) in the home is bound up with prevailing imaginaries of idealised family life [46; 2642]. Such idealised imaginaries have implications, in that energy consumption in the domestic setting is not part of reflexive awareness of moralities that might otherwise play a part in the reproduction of everyday practice. What is deemed non-negotiable or 'normal' in the sphere of everyday consumption is bound up with the temporal and spatial dynamics of everyday energy demand [56].

### 4.2. Gwen: getting the balance right

Gwen is in her mid-sixties, retired, and lives with her husband, Michael, in a secluded house overlooking an estuary. Originally from mid-Wales, Gwen's work-life had driven her many residential relocations both nationally and internationally before she ended up in north Wales, where she met Michael in the mid-1980s. Reflecting on their move to their current home, Gwen noted that where they moved to largely rested upon Michael, as he "*worked locally*", whereas she "*spent a lot of time travelling*" across Britain with her job, and thus was rarely home during the week. Over time, however, Gwen felt that she was "getting a bit tired" of "*working away all the time*", and decided to give up her career in favour of a local job with a daily commute of only three miles. Gwen continued to work locally for another eight years, gradually reducing her workload before both she and Michael retired at state pension age. The transition to retirement presented the couple with an opportunity for change, particularly with regards to their transport practices.

> *"Since we were retired we just got the one car, whereas before we had two– and that works out as long as we both put down in the diary what we've got on a particular day."*

Here, we can see that keeping a communal diary gives the couple ample opportunity to plan and negotiate their travel practices ahead of time, which often involves either sharing a lift or using the train, with the nearest station being a mile away. Gwen, however, describes using public transport as being "*a bit tricky around here*", given the infrequent services and convoluted journeys. Here it is possible to see how material, personal and social processes combine to shape particular possibilities for change. Gwen's pathway to retirement gradually freed her from the temporal and spatial pressures associated with her work, reducing the need to be geographically mobile and providing her with a newfound 'wealth in time' [57]. This wealth in time facilitated the transition from a two- car to a single car household, however, it could not have been feasible had Michael not retired at the same time as Gwen, thus highlighting the role of significant others in shaping

opportunities to reduce energy demand (*see* [12] ; [58]). Additionally, this narrative demonstrates how efforts to reduce personal transport-related energy demand might be mitigated by structural developments, characterised by a spatial unevenness of investment in national transport infrastructure that renders car ownership as being both economically and socially beneficial [59].

According to Gwen, the couple's lifestyle, particularly since they had retired, had been influenced by their interest in and commitment to sustainability; an interest which had remained consistent for Gwen since her involvement in environmental protection groups "*quite early on*" in her life. Since retiring, the couple had become involved with the running of several community-run environmental groups, which often means that the couple are "*quite busy*" as they do a "*lot of to-ing and fro-ing and meetings and so on*", placing increasing pressure on their time budgets;

> *"We're finding that we're spending days and days on all this stuff – when we are retired you know- I keep telling him we need to retire again because it's getting unmanageable really, and it's not fun […] So that's a bit of a downside that we've got to resolve really, 'cause it's not sustainable for our health and wellbeing [laughs]."*

Clearly, Gwen's post-retirement trajectory has been influenced by demographic shifts over the last three decades that have influenced wider societal discourses and cultural values on active ageing. Such discourses view post-retirement 'work', i.e. paid work or volunteering, as a means to provide temporal structure to those adjusting to retirement, which is also thought to be beneficial to the health and wellbeing of retirees while also benefitting the community [60]. However, it seems that the temporal pressures associated with the couple's civic commitments go against Gwen's expectations of retired life, which is characterised by greater levels of temporal flexibility. Indeed, Gwen's story highlights continuities, in terms of temporal pressures, between her working and post-retirement life (*see* Thompson et al. [61]), which could potentially work against the couple's efforts to reduce their travel-based energy consumption.

Indeed this was a pressing concern for the couple as they had purposefully bought a "*more efficient car*" to reduce their carbon emissions. The couple's interest in sustainability thus has a bearing on the way they manage their mobilities, particularly given that they have to travel for considerable distances to access cultural amenities that they both enjoy, such as attending theatre and ballet performances, as well as visiting family in mid-Wales and the south of England. As such, Gwen and Michael also engage in much longer distance travel than that required by their civic

commitments, albeit on a monthly rather than daily basis. Whilst the couple are less inclined to use public transport for short trips, they do make use of the train for longer distance journeys, as "*it's probably cheaper and less stressful than driving*", but often "*takes a bit of planning*". Their journeys to the south of England in particular have become increasingly frequent as the couple have taken on the additional responsibility of caring for Gwen's mother-in-law;

> *"I suppose one thing is we're going to [the south] more often to visit [Michael's] mother because she's in her 90s and hasn't been so well this year. She's had a couple of falls and she lives on her own still -quite independent- but she's, you know, if she's on her own a lot she doesn't eat so well, so she just needs a bit more looking after […]"*

Again, Gwen's narrative points to how a series of societal trends[5] have, in complex ways, changed relationships between generations. In particular, more people over the age of 65 are feeling the social pressure to take on informal caring responsibilities whether for partners, children, grandchildren, and increasingly, their own parents (*see* [62] ; [69]).

The issue of holiday travel was raised in the second phase of data collection, which involved a household interview with Gwen and Michael together. As part of their sustainability ethos the couple "*[have] tried not to fly too much*" in recent years. However, recent events meant that both Gwen and Michael felt that their energy consumption in relation to holiday travel, particularly flying, had been "*worse than average*", as the couple had recently flown to New York whilst Michael had also flown to Iceland earlier in the year. Clearly, these trips were at odds with the couple's environmental values, so what motivated them to choose to travel to such a distant destination?

**Michael** *I think we're reaching the stage where time's creeping on and you think, well there are some places in the world that you really would like to visit or experience, and it may not accord with your principles of reducing energy consumption but if you don't do it now then maybe you won't ever have the chance to do it=*

**Gwen** *Well I had a big birthday this year so we went to -I'd never been to New York=*

**Michael** *So we went to the States -we flew to the States this year=*

**Gwen** *And we haven't flown to North America for a long, long time.*

[5] Including (but not limited to) increased social and geographical mobility, housing supply, greater educational opportunities, the retraction of the welfare state – particularly in terms of health and social care – and much more.

In the above excerpt Michael positions the couple's international trips almost as a necessity, or rather, a last chance opportunity for them to experience meaningful places before they become too old or infirm to do so. Here we can see how this narrative of making the most of the time you have could be influenced by wider social discourses in relation to the physical decline associated with the process of ageing, which are, in direct contention with the couple's travel aspirations (*see* [62]). Indeed, how the couple saw their future had a direct effect on their energy consumption as Gwen concludes that "*there are some decisions that you can't –you know, you have to go with it don't you? You can't be perfect can you? [laughs] You can only do your best*". This future-oriented concern in relation to time and health status continues in Gwen's narrative as she stated that she often discusses the future with her husband Michael, which leads them to think about what happens when they get "*very doddery*";

> *"I think if you were looking at the really doomsday scenario where one of us would […] become ill or infirm -or things that would make it more difficult for us to physically live where we are- you know, you need when the best of the will in the world you need a car, and as long as we're able to drive, then we feel we can continue to live here. […] It's things like that -I wouldn't say it concerns us particularly- but there's things we talk about, like 'can we continue living here into our eighties?' Hopefully we can – that's what we'd like- you know, but we don't plan. I'd like to live the rest of my life here and I'm hoping I'll be fortunate enough, but we don't know what's coming down the road. I can't imagine anything else you know – I mean financially we're fairly fortunate [...] Our families are around, we've got good friends and neighbours. It's health I suppose that's your most valuable commodity."*

Gwen views having access to personal transport as a key requirement for maintaining independence in later life, as losing the ability to drive would render the couple unable to continue living in such an isolated place. Consistent with the literature on rural ageing, Gwen recognises that the physical and/or mental decline associated with the biological process of ageing could eventually make their relocation necessary. Gwen is confronted with uncertainty when looking into future as she wants to remain in her house, but "*doesn't know what's coming down the road*", and thus prefers not to plan ahead. In thinking ahead then, Gwen attempts to keep the future largely 'absent from her everyday consciousness' [5; 80] to protect against anxiety at the prospect of having to move elsewhere.

## 5. Discussion & conclusion

This paper set out to demonstrate how everyday energy practices are part of life processes that are context dependent, dynamic and always under construction. Through the presented case-narratives we can see how all manner of relationships come into view as part of a very highly textured story about energy as part of dynamic, embedded processes in all sort of interconnected ways. We have set out our stall explicitly to engage theoretically with such relationships by studying processes that give form to lives as lived in relational, rural space, and that involve shaping by historical and spatial context. By making explicit links to relational thinking within geography and the wider social sciences, and by drawing on notions of practice and taskscape as well as concepts from life-course theory, it proved possible to generate a useful analytical lens for developing a concern with how 'space and energy are constitutive of and simultaneously constituted by social lives which depend on energy' [63]. Such a lens has explicitly enabled us to focus in on dynamic change in life processes and lived spaces that are always under construction and thus produce multiple readings of the presented case-narratives. Our focus on lived, relational space, is one that future work could develop further as a means of putting relational space to work in research on everyday energy use.

This paper speaks to debates on the ways in which expectations, aspirations, uncertainties and imaginaries work in a relational way to frame energy use in the present. Through our analysis, multiple tensions related to this 'present future' are brought to light. For example, in Alys' narrative it is possible to see difficult-to-resolve tensions between her idealised imaginary of family life in her home region and the realities of making it happen. Commitments in various life domains result in Alys feeling pressed for time, a feeling which is alleviated by her turning to what she deems to be unwise parenting practices to manage both her and her family's time more effectively.

For Gwen, the expected and gradual transition to retirement opened up opportunities that would enable her to make changes that would support her sense of care for the environment. Among these changes were her and her partner's decision to own a single, more efficient car, and their increased involvement in a series of local community groups. Her expectations of having more leisure time and less stress and experiences of getting busier in retired life however, did not match; particularly in light of her mother-in-law's ailing health. While Gwen reflexively engaged with these tensions, they were by no means easy to address. Gwen and Michael could not easily withdraw from their civic commitments for example, just as their caring for Michael's elderly mother was non-negotiable. The tensions between Gwen's care for the environment and her love of travelling

however, were disavowed, as she and Michael justified their recent trip abroad by stating that they aren't perfect and are doing the best in light of their progressing age.

This reading of everyday energy practices as being mediated between different matters of concern has shown how socio-cultural ideals and identity-forming processes work constructively in the making of the present, which – as is evident in both narratives – can have implications in ways of organising time and using energy. It also shows how future identities are often tied up with envisaged loss of aspirational goals, and how uncertainties that come with what is 'not yet' are highlighted when the focus is on future identities and lives. This is particularly evident in Gwen's narrative concerns with 'who I will be' rather than 'who I am'. As such, expectations of the future are particularly important to understanding everyday energy consumption given that they shape how much individuals are willing to invest, both financially and emotionally, in the present.

Our empirical work has thus shown that there is a need to better understand differing ways of making sense that seem to create barriers to putting morally felt commitment to sustainability into practice. Disavowal can be a key issue here (for extended discussion of the concept see e.g. [64]); and one that cannot, for example, be reduced in any simple way to an opposition between self-oriented concern and concern for future generations. Neither should this be confused with dropping long-held commitments to living a sustainable life, but instead should be read as individuals seeking to find a balance, which often requires them to do contradictory things at once. The need to do this comes out of living with tensions between different priorities.
To appreciate the nuances of such sense-making practices, there is a need to better understand the implications of the dynamic interweaving of biographically and generationally meaningful ways of making sense of difficulties in life that manifest themselves as part of everyday energyscapes. Taking a relational perspective on life processes and lived spaces, as we have in this paper, enables researchers to bring these tensions to light in ways that would not be possible in systemic analyses of everyday practices.

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