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DISTURBING SLEEP AND SLEEPFULNESS DURING RECOVERY FROM SUBSTANCE DEPENDENCE IN RESIDENTIAL REHABILITATION SETTINGS

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ABSTRACT

There is evidence that poor sleep mitigates recovery from substance dependence and increases risk of relapse. However, to date research literature is located within biomedical, clinical and psychological paradigms. To complement the extant work, this article offers a sociological exploration of sleep in the context of recovery from dependence on alcohol and/or other drugs. Drawing on qualitative data generated through interviews with 28 men and women living in residential rehabilitation settings in England, we provide a detailed exploration of sleep practices focussing on how these are enacted throughout the night. We offer the concept of *sleepfulness* to suggest that sleep should not be understood simply as being other than awake; rather it involves a myriad of associations between diverse actants - human and non human – that come to 'fill up', enable and assemble sleep. Together these empirical insights and conceptualisations disturb the ontology of sleep and point to the fulsome dimensions of the category.

Keywords: Recovery, Sleep, Drug use/substance abuse

INTRODUCTION

This article offers an empirical exploration of sleep practices as enacted in residential drug and alcohol rehabilitation services. There is a growing biomedical research literature on sleep, substance use, and recovery, which finds sleep quality to be associated with relapse and recovery (Arendt et al. 2007; Brower 2003, 2015; Roehrs and Roth 2008, 2012; Roth 2009). Recent interventions to improve sleep in the context of recovery rely on forms of cognitive behavioural therapy, although these have had limited success (Arnedt et al. 2011; Smith et al. 2014). The aspiration of this paper however is not so instrumental; rather we seek to provide a theoretically informed empirical description of how sleep is practised in residential rehabilitation settings for substance dependence. How do men and women in these environments perform and enact sleep? What are they doing when they sleep? How, and to what extent, are actants recruited to enable sleep? Indeed, what is sleep? These questions are consistent with theoretical approaches inspired by synergies between science and technology studies (STS) and medical sociology (Mol 2002). In particular, what Sismondo (2015) refers to as the 'ontological turn', and Fox (2016) as a 'turn to matter'; that is, approaches which seek to explore the materiality of bodies as they engage with other material and cultural relations. Rather than presuming an *a priori* knowledge of things, such as 'the body' (Harris and Robb 2012), 'disease' (Mol 2002), 'addiction' (Fraser et al. 2014), or indeed 'sleep' (Hsu 2015), this approach seeks to explore how these objects unfold in situated spaces and contexts.

We begin with a brief review of the relevant literature on the sociology of sleep, move on to outline our theoretical, or perhaps more accurately, our epistemological approach, which in turn informs the analysis of our empirical data. To paraphrase Mol (2002), who writes about 'the body multiple', we might think of 'the sleep multiple': an uncertain, provisional set of activities variously connected yet recognized as sleep. Building on this, through the analysis of our data, we develop the notion of *sleepfulness*. *Sleepfulness* implies that sleep can be understood as an assemblage of associations of human and non-human actants that 'fill' and enable sleep. By positioning our data in this analytical framing we seek to extend sociological conceptualisations of, and debates within, the sociology of sleep to which we now turn.

SOCIOLOGY OF SLEEP

Williams (2005) highlights how the analysis of sleep and society operates on at least three interrelated levels, with the broadest of these levels – societal/institutional – focusing on the ways in which sleep is socially patterned and organised. Schwartz (1970), for example, highlights how sleep is brought under institutional control through scheduler integration and a supplementary body of rights and obligations that surround the sleeper. As Melbin (1978) notes, though, the night may no longer be the scheduler integration *par excellence* and there is gain in considering the night as a 'frontier'. This concept, which we return to below, 'gives coherence to a wide range of events: the kind of people up and about at those hours, why they differ from daytimers in their

behavior, the beginnings of political efforts by night people, the slow realization among leaders that public policy might be applied to the time resource' (p.19). Sociological work at the 'individual/(non)experiential level' highlights how sleep is a liminal state which exists somewhere between consciousness and unconsciousness, the biological and the social, the universal and the specific (Williams 2005: 4-5). In this vein, others have explored how embodied biographies of drug use, and the recalcitrant bodies of users, can mitigate the cultivation of sleep understood as a 'body technique' (Nettleton et al. 2011). The attention to body techniques begins to point to the limits of human intentionality and the voluntary agency of sleep (Williams and Crossley 2008).

Overwhelmingly, empirical analysis of sleep and society has focused on the 'social/interaction' level and the 'meanings, methods, motives and management of sleep or sleeping in everyday/every night life' (Williams 2005: 1). In one of the first empirical studies of sleep and society, Hislop and Arber (2003) offer the notion of 'personalised sleep strategies' to capture the ways in which individuals work at achieving sleep within given physical and social environments. Further studies of couples (Meadows 2005), co-sleeping parents and children (Welles-Nystrom 2005), carers of elderly relatives (Bianchera and Arber 2007) and women in mid-life (Hislop and Arber 2003) all further demonstrate the socially negotiated processes associated with sleep.

Our own approach critically engages with and extends this existing work, in particular we avoid privileging individual human agency, suggesting instead an analysis of a confluence of sleep practices that includes actants, which have

scope for both intentional and unintentional agency (Hsu 2015). Although socio-materialities have been largely absent from the existing literature, Moran-Ellis and Venn (2007) neatly capture the diversity of human and non-human materialities that enables children's sleep through their attachments to, for instance: toys, pets, thumbs, as well as their anxieties, dreams and nightmares. While we also emphasise socio-materialities, our approach is epistemologically distinct from these existing sociological studies. The extant literature has developed theories on sleep that centre on interpretations and meanings, and the extent to which individual actors 'work' at and 'negotiate' their sleep. Instead, we do not presume an *a priori* knowledge of sleep that is variously interpreted and socially constructed, but rather take an ontological approach to consider how sleep is 'enacted', 'assembled' and comes to 'hang together' (Mol 2002: vii).

TURNING TO NEW MATERIALISMS AND TROUBLING ONTOLOGIES

Conceptual developments labelled by some scholars as the 'new materialisms' (Fox 2016) have been usefully deployed for the study of drug addiction (Duff 2011; Fraser et al. 2014) and more recently 'non-human sleep' (Hsu 2015). While others talk of an 'ontological turn' (Sismondo 2015: 441), what unites these approaches is an ontological approach that presumes objects, such as the body, disease, or addiction, are not variously socially constructed through the lens of contrasting perspectives, but are instead understood as things that are brought in to being and sustained through day-to-day socio-material practices (Mol and Law 2004; Mol 2010; Duff 2013). As Mol (2002) explains:

> 'If practices are foregrounded there is no longer a single passive object in the middle waiting to be seen from the point of view of a seemingly endless series of perspectives. Instead, objects come into being – and disappear – with the practices in which they are manipulated. And since the object of manipulation tends to differ from one practice to another, reality multiplies' (p.5).

Following this approach, we are less interested in the meanings that individuals invest in, or their proactive management of, sleep than the relational forces that sustain it. Like a disease, or a body, sleep is not insulated from other related practices, but it comes to stabilize as a recognizable 'thing' that is made up of a 'complex configuration' of things (e.g. discourses, practices, and objects) that always harbour a degree of fragility (Mol and Law 2004: 57). From this position, sleep may comprise, 'a coexistence of multiple entities with the same name' (Mol 2002: 151); like the body it therefore 'hangs together' although 'not easily' (Mol and Law 2004: 57). To use the lexicon of science and technology studies (STS), sleep can be understood as an 'assemblage' (Mol 2002: 150; Fox 2016). The sociologist's task then takes the form of an exploration of those things recruited to this configuration in order to examine, 'how ontologies of the body really work "on the ground"' (Harris and Robb 2012: 669).

In summary, STS inspired materialist approaches seek to query the ontological status of objects such as, 'disease', 'illness', 'health', and 'sleep', suggesting they can be empirically explored to describe the fragile configurations of material things that come to settle in a recognisable form. But their configuration will in turn vary depending on 'the contexts in which people find themselves' (Harris

and Robb 2012: 672). Explorations of ontologies on the ground, what Mol calls 'praxiographies' (2002:2), involve description of the ways objects are assembled 'within a wider network of social, material, and affective forces' (Duff 2013: 167). Fox, for example, writes about a 'health assemblage', an 'eating-assemblage' and an 'ill-health assemblage' (2011, 2016). A 'sleep assemblage', we can anticipate, will be fashioned through various psychological, physical, and social relations which, in the context of drug and alcohol treatment and recovery, can include structured routines, therapies and psycho-social interventions. These make up, and can extend our thinking on, what Moran Ellis and Venn (2007) call the 'arenas of night worlds'. Before we go on to describe these actants that enact sleep in more detail, we first provide some information about our empirical study.

STUDY DESIGN

Empirical data reported on in this paper were generated as part of a study of sleep in two residential drug and alcohol rehabilitation services in England in 2014-2015. Centre One was located in a rural setting, and Centre Two in an urban environment. In the former there were both men and women, in the latter only women. Centre One provided predominantly 'primary' treatment. This lasted between four and six weeks and involved supervised detoxification (as needed), a treatment programme comprising group therapy, one-to-one counseling, creative workshops and lectures (on art, writing etc), complementary therapies such as yoga, and a requirement to participate in household duties. Total abstinence was demanded, although smoking tobacco was permitted. Days and nights were highly structured, with regular times for

waking, meals, classes, bed, sleep and so on. Each day began with a collective meeting and a 'thought for the day' and, when residents left, after successfully completing their treatment, there was a formal gathering and small ceremony as acknowledgement of their achievements. Centre Two provided 'secondary' treatment where the aim was to build confidence and life skills. The programme was less rigid. Residents collaboratively participated in daily activities such as; shopping, cooking, eating, and budgeting. As their recovery progressed, residents were able to come and go from the service and were permitted to have overnight stays at home. Bedtime rules were more flexible than in Centre One, although there was still a requirement that residents be in bed at night and up during the day. In both centres all residents shared bedrooms.

Ethical approval for the study was secured from Universities of York and Surrey. The authors visited the centres to have informal discussions with staff about the treatment programmes and house rules, complete a tour of the facilities, present the research to staff and residents, and recruit residents who were willing to participate. Participation in the study involved a qualitative face-to-face interview, wearing an actiwatch, and completing a written sleep diary for two weeks. An actiwatch is a small, wrist worn device which measures movement on a minute-by-minute basis and has been used widely within clinical sleep research as a proxy measure of sleep (Martin and Hakim 2011). After wearing the watch and keeping a sleep diary for two weeks, individuals participated in the face-to-face interview. Data from the actiwatch were downloaded via a notebook computer and presented to participants in the form of a graph towards the end of the interview. At that point, participants were invited to reflect on the

actigraph results. These multiple forms of data enabled us to examine how participants' accounts aligned with what are regarded as technical measures of 'being asleep', thus generating a richer understanding of the way sleep is sustained and the extent to which it is *sleepful.* In this way we 'side stepped' an *a priori* ontology sleep.

Thirty-seven participants were initially recruited across the two sites. Of these, 28 were interviewed, 25 returned actigraphy data and 19 completed diaries. Of the 28 people interviewed, 19 were women and 9 were men, with the youngest aged 24 and the oldest 83 years, most were white British. There was greater diversity in terms of participants' age, socio-economic and educational backgrounds in Centre One. Seven of all those interviewed had been educated to degree level, and a some were in professional occupations, although most had left school at 16 years, some with few, if any, qualifications. All had previously received support from either residential and/or community services for their addiction. Interviews explored participants' biographies, substance use, personal experiences of addiction treatments and accounts of sleep throughout their life course, although particular attention was given to their sleep during the two weeks prior to the interview when most had been wearing the actiwatch and completing the diary.

All interviews were carried out in the centres by two of the authors (RM and SN) of this paper, with the exception of three that were undertaken by a sociologist experienced in sleep research. All interviews were audio recorded and transcribed, and names of all participants have been changed for anonymity.

Participant identifiers (001-028) were used to link the interview, diary and actigraphy data and 'S1' and 'S2' are used to indicate whether interviews took place in Centre One or Two respectively.

Our analytic approach treated the data as accounts that provided clues as to how sleep practices are done on the ground, and how they are sustained in relation to activities and accoutrements (Harris and Robb 2012). Just as Mol's (2002) interviews with patients living with atherosclerosis conveyed, 'a lot about legs, shopping trolleys, or staircases' (15), our data, as we shall see, convey a lot about – amongst other things - beds, drinks, radios, clocks, cigarettes, sweets and baths. Although our participants reported that they were not using alcohol or other non-prescribed drugs at the point of interview, their embodied biographies of dependence permeate their sleep. It is to how men and women 'do' (cf Mol and Law 2004: 45) sleep in drug and alcohol residential rehabilitation settings that we now turn.

DOING SLEEP IN RESIDENTIAL TREATMENT

Sleepful nights: (de)stabilising sleep

Echoing previous sociological studies of sleep and recovery from substance dependence (Neale et al. 2012; Nettleton et al. 2011), the participants reported how their sleep improved after entering residential treatment, and sometimes in ways that they had not anticipated. Orla (013:S2), who was interviewed in Centre Two and had previously been at Centre One, recalls how she 'was shocked that I slept' on her first few nights in residential treatment: 'I got into bed, said my prayers and I was completely asleep'; she adds 'I had my first good night's

sleep for years'. This she associates with the treatment setting; a 'safe' and 'structured' place, where life has 'slowed down'. Melanie (001:S1) similarly notes that her sleep improved:

> Here I have been in a secure environment. No fear, no nothing. If I collapse, if anything happened, if I am sad, if I am happy, if I am pissed off, there is always - 24 hours -people around me. So to go out there, to the real life, I tell you …

Residential life brings protection but the anticipation of 'real life' seems daunting for those who have previously managed its demands through recourse to substances. As Christopher (006:S1) cautions 'recovery really starts when you have to face up to problems… in the real world. We are a bit cocooned here and it's safe'.

Yet reports of 'good nights' and immunity from a 'real world' belie a complex set of practices that mediate sleep, and closer scrutiny reveals that nights can be *sleepfulsome*. Betty (018:S2), for example, had been in recovery for many months and, having progressed through a number of residential treatments, reports her nights to be relatively peaceful: 'I'm actually happy with the amount of sleep I'm getting compared to what it was like when I was drinking'. Yet her account of her 'improved' sleep involves a fair degree of activity. When discussing her actigraphy data, the interviewer points out that although she describes her sleep as 'good', the actigram indicates fairly high levels of movement during the night. Betty explains:

> I was probably up and down, coming out for a fag and coffee; plodding around, not like jogging round the house doing star jumps! Probably did

> get up and down. It's usually… I don't tend to come down[stairs] that much anymore during the night. I come in at half 11. I'm not usually here on a weekend, so the 12 o'clock curfew is irrelevant, and then I'll come downstairs and I'll have a coffee and go outside for a fag, and if someone's up I might stay outside chatting with them for half an hour and then I'll go upstairs and kind of just read books and stuff for a little while, and then, so basically just read, self-study in my bed. I don't tend to do a lot.

'I don't tend to come down much' and 'I don't tend to do a lot' imply that she is having better quality sleep compared with previous experiences. Although *prima facie* 'disrupted' (cf. Hislop and Arber 2003), her sleep can be seen to involve a fulsome set of socio-material things: chatting, self-study, coffee, a fag, and a book. A sleep wake dichotomy can betray the extent to which sleep, in the 'arena of the night' (Moran Ellis and Venn 2007), is accomplished through a busy engagement with activities and artefacts. These social and material things are in the weave of sleep. There is always something going on.

Sleepful nights: artifacts

In Centre One the bedrooms are divided by wooden panels so designed, the staff told us, to give residents a degree of privacy. Although, for Peter (003:S1), the panels afford another use:

> It is incredibly rare that I will just lie and do nothing. I find it very…almost impossible to lie and do nothing and be awake. Actually, this is interesting that I noticed […], when I have been going to sleep as well I will quite often be tapping on the wooden panels by the side of the bed or doing stuff with my teeth like that. Some sort of little body movement or

> something. […] I do it unconsciously, but then realise you are doing it again. But sometimes it feels like some sort of distraction tool in some way to just distract myself from my own head; and then, if I have noticed it, I will go "stop it". Deep breaths - breathe in - if I remember to do it, it is a really helpful way of helping me go to sleep.

Tapping facilitated by the proximity of the wall, becomes a 'sort of distraction tool' associated with his embodied sleep. It provides a means to deflect thoughts, as does the deployment of breathing techniques learned during therapy sessions provided as part of his treatment. All are in the loose weave of the *sleepful* night; the sleep and wakefulness divide further unravels as Peter reflects: 'I do it unconsciously', a point we return to below.

Phones, laptops and radios are ubiquitous in the network of actants that enable the residents through their *sleepful* nights. Anna (026:S1) describes how last night she put on a CD:

> It's a book, *The Goldfinch*, and I must have gone to sleep, because when it came to the end of the tape [sic] and I can't remember what the end of the tape was, so I'd obviously gone to sleep, but then I was awake.

The CD meshes with sleep and enables her awareness that she had slept, thus acting within the orchestration of *sleepfulness*. Like other residents, she is keen to undo her reliance on such devices. Here we see traces of sleep hygiene; advice espoused by sleep experts who would caution against using technologies at night. These traces of expert discourse are examples of what Mol (2013) refers to in her work on eating as 'ontonorms', a concept that she explicitly refuses to define. Nonetheless, as a sensitizing notion, Mol uses it to demonstrate how

eating is enacted (the 'onto') in accordance with authoritative advice on 'how to' eat 'appropriately' (the 'norms'). Ontonorms, she argues, help us to look for the ways science permeates daily life, and she encourages researchers to 'hunt' for them (2013: 390). Prior to entering residential treatment, virtually all participants described sleeping 'with' the TV, radio or music on, something roundly regarded as unacceptable practice in the psycho-clinical guidance on improving sleep. Peter (003:S1) again:

> Well to distract me and help me sleep, very often I would fall asleep with the laptop on. And that is something I have improved on. My instinct now is not having my phone, and not having my computer… has been really helpful. Because I'm not reliant, in the same way as I used to have to have music on to get to sleep. That has quite often been the case with the laptop and having a film playing in the background. It is like having a comfort.

We see then technologies and tools as actants embedded in *sleepful* nights. Peter no longer has his laptop but taps a wooden panel. He is not alone in drawing on such accessories. Harry (002:S1) describes how he recruits communication technologies as a buffer to memories that merge within sleep. Yet he also knows he 'ought' to sleep without them:

> I was staying up late watching TV so I could go to sleep, so my mind won't be going around so much. I'd go up to bed, I'd always listen to Radio 4 for an hour or two, and I learned a lot from the news and that […] But I'm not going to do that anymore, because I think that was depressing, it was just a block, blocking out thoughts. I don't think it's healthy. Before I'd have the TV on all night. I'll sleep, then when I wake up I watch TV again, go

> back to sleep. So I can't sleep without TV. Here there's no TV. I say OK, I should get used to this.

Residents are clearly familiar with what Williams (2007) calls the social etiquette of sleep; the 'oughts' of sleep as embedded in the norms and values of Anglo-Saxon neo-liberal societies.

Residential treatment services may feel like safe spaces, but they are not impermeable. Residents who 'ought' to be in bed at night are drawn to other settings, phones for example, provide routes to global places. Ellie (020:S2), when commenting on her anxieties associated with the anticipation of leaving residential treatment, talks about what we can conceive of as *sleepful* activity:

> I was on the phone last night to Minnesota. I was talking to people in bloody Outer Mongolia, like in the rooms in NA [Narcotics Anonymous]. And I was really getting into it, and I looked at the clock, it was two o'clock!

Thus networks extend beyond the bed, bedroom and even the Centre, especially as technologies such as smart phones and laptops become part of our embodied selves. Such technologies increasingly present in sleep spaces do not, as Hsu points out, always wake up and sleep as 'anticipated', indicating 'the situational agency they can exert' (2015: 10).

Sleepful nights: atmospheres

Thus the mediums through which anxieties transcend the spatial boundaries are broadened and invoke affects. Tina, for example, finds the nighttime affords opportunities to give expression to her emotions, a time when she cries because

she tries to 'keep my feelings to myself during the day' (004:S1). Tina's 'lived body' *dys*-appears (Leder 1990) as thoughts, memories or worries infiltrate, altering at the full plethora of sleep practices, pointing to their affective effect. That anxieties come to the fore during the night is something that many people might recognize, but for those whose feelings have for many years been numbed through substance use, emotions can act differently. In particular, they can feel strangely unfamiliar when not mediated by drugs or alcohol, further complicated by the fact that those in recovery often have complex emotional biographies (Nettleton et al. 2011). Although demographically diverse, all the study participants reported histories of challenging life events and emotional isolation. Regret, guilt, anger, fear and loneliness were palpable within the data. No longer numbed through alcohol or drugs, but now prodded throughout the day in counseling and therapy sessions, emotions become critical to the enactment of sleep. Ollie says 'you're scared of the night sometimes' (030:S2); Agatha explains 'I wasn't sleeping because I was scared to sleep' (033:S2).

Silence too is an actant that can be provocative; invoking affects especially amongst those familiar to the drone of a television or radio. Silence enables other noise, as when, for Tina (04.S1), the body audibly *dys*-appears:

> When it is late and you can hear *bumph bumph bumph* [mimics the sound of her heart beat]. And if I hear one beat that goes out of rhythm, like a palpitation or something, I'll panic straight away. I am like, "Oh my god!". So I have got to roll over, so I can't hear my heart beat. You know, I have to have a distraction, so I'll try and think about something. I don't know, the sky or something, animals or something.

The body interferes. The full bladder necessitates getting out of bed; decisions as to whether to put on the light are complicated by the need to minimize disturbance of roommates. Going to the toilet, then returning to bed or instead opting to go and find a sofa, or another place to hang out, and then whether to have a hot drink or a cigarette. The 'arena of the night' in residential treatment affords situated choices as Elizabeth (024:S1) explains:

> Well you have two or three alternatives. You can lay in the dark. What I would do in the beginning, I took baths. I took a bath, but that [points to the actigraph data] wouldn't show, because I take off the bracelet [the actiwatch], and I would go down and get camomile tea. You're allowed to do that and come back and try to sleep.

Beds, baths, lights, drinks, books, roommates, and radios are actants that come and go and variously play in the multifaceted networks that make the assemblage of *sleepfulness*.

Assemblage of sleepfulness

Assembling *sleepfulness* relies on devices that, like the actiwatch, contribute to the performativity of sleep. The clock is perhaps the most ubiquitous 'inscription device' (Latour 1987) in this context. Sleep discourse is replete with temporal framings and the clock provides a means of reflexively assessing whether 'sleep' was done:

> I'd like turn over and I'd look at the clock to see what time it was, thinking I might have slept and it might be coming up to morning time. But it would always be ten past, and then I'd turn over and look at the clock, twenty to, you know, so all throughout the night. (Helen 027: S1)

Here the clock authenticates sleep; Helen cannot rely on her embodied assessment, so checks it to see whether she 'might have slept'. Elizabeth (024:S1) similarly learns about her own 'sleep' from her roommates. She reports how she felt that she had 'not slept', but then 'somebody in the room says "no I heard you snore dreadfully, so you were asleep"'.

Clock time, temporal routines, temporal framings, roommates, and other residents permeate the night in other ways. The temporal structuring of residential treatment is rooted in 'ontonorms' (Mol 2013). Rules relating to the ordering of days and nights vary in terms of rigidity between different residential treatment centres. The imposition of a highly structured regime is a means to operationalise the goals of rehabilitation, and the internalization of proscribed bodily habits that are congruent with wider social norms (cf Foucault 1977). But we find the residents to be canny at navigating the proscribed ways of sleeping, with some having honed their skills of side stepping societal norms and expectations in order to source drugs or alcohol.

Rules invite resistance which is a feature of nightlife in the two residential treatment centres. Kirsty (011:S1) explains how in Centre One, after one in the morning, residents can get up for half an hour and go downstairs to the communal areas, and 'as long as you return to bed for an hour, you can go down for another half hour'. She managed to work the system to get more time out of bed:

> I found a snag! If I made sure that I got up an hour and a half before I was allowed to wake up, then I got an extra half hour, because I didn't have to

> go to bed. I could just stay downstairs. Because, by the time my half hour was up, it was time to get up anyway.

So Kirsty goes downstairs and busies herself: 'you can get some cereal, sit on the balcony, have a fag or whatever' to enable her through the night. The rules are also generative of collective interactions and social dynamics that infiltrate and broaden *sleepfulness*. As we noted above, according to Melbin, 'social life in night time has many important characteristics that resemble social life on land frontiers' (1978: 19). He suggests that 'nighttimers' perceive themselves as 'different' and 'they resent the neglect shown by people in the day' with the consequence that a nightime 'in-group feels comradely within itself' (1978: 19). Karen (019:S2) eloquently describes such 'in-group' feeling and portrays the mood of the night:

> I would usually wake up around four, maybe go for a cigarette. And there's always the danger, because they have really clear night time boundaries, but if there are other people, if there were other opiate addicts, there can be a culture that is created, and it's like the living dead, that kind of … and you know we gather kind of thing and it becomes quite seductive, the environment, the lighting, it's dark, we're talking about what we did and how we got there, and it's quite dangerous really. It's dangerous because it becomes attractive; and it's behavioural. It's like tapping in to those old behaviours, with a few boundaries being pushed. Someone might have a little bit of contraband, sweets or… It sounds really stupid on reflection, but pushing the boundary, so someone will go, "oh look, I've got a bag of sweets", and we're sitting eating sweets. The nurses come down and say 'come to bed', and we just laugh. And then

> they come down again and they leave you then, the nurses. And then you know you're in the shit. I got put on a contract [formal punishment] for that.

Thus the social configurations of the night are differentiated from those of the day and are shaped by the specificities of the centres themselves and the embodied biographies of those in recovery wherein some find collective empathic appreciation of the lure of 'danger', the 'contraband' and testing boundaries.

We might speculate that nighttime rules of other residential settings will provoke activity, but these will of course vary according to the details of the institutional aims and aspirations, as well as the demographic profiles and backgrounds of the residents. There were even differences between the two centres we studied, such as relations between residents in conjunction with the emotional currents engendered within the particular atmospheres. These dynamics change over time and are contingent on the relational networks that are constantly reassembling sleep. Night-times take on particular atmospheres (Anderson 2009; Galinier et al. 2010), heavy with affect such that social relations take on situated dynamics. As we have seen here, solidarities and schisms may be forged within the spatio-temporal specificity of residential 'therapeutic landscapes' (Laws 2009) with residents variously engaging in these dynamics.

Rules, rooted in ontonorms, can generate tensions in relation to embodied sleep biographies. As we have seen, imposition of structures and sleep etiquette provokes activity. It can also amplify anxiety and struggles within sleep. Kirsty

(011:S2) reflects on not being allowed out of her room in some rehabilitation services, whereas here, 'being able to just come out and maybe make yourself a cup of coffee, or have a chat with the nurses and stuff like that really help'. *Sleepfulness* can therefore comprise techniques to counter affective atmospheres (Anderson 2009) of the night, and the amelioration of isolation in bed. As Kat (036:S2) puts it, whereas 'in the day I've got people I can talk to. Of a night I feel more isolated.'

Beds and bedrooms mingle with biographies. For some the bed is a site associated with fear, violence or loneliness (Lowe et al. 2007; Williams 2007a). While the ontonorms associated with sleep hygiene presume the merits of temporal and spatial remission, bodies doing sleep in recovery may not. As Ellie (020:S2) puts it, being in bed is 'probably my most vulnerablest [sic] time. It's when I'm alone; I don't like being on my own'. This affect, in the weave of sleep adds to what Wetherall refers to as 'affective textures' (2012: 4) that form through the ecological play of emotional practices. As we have seen, sleep practices as 'affective practices' (Wetherall 2012: 3) in the context of recovery from substance addiction are entangled. Both are linked to the recruitment, resistance and responses to objects, norms, institutions, and interpretations that fold in on bodies. *Sleepfulness* then implies that sleep is far from a form of social remission (Parsons, 1951; Schwartz, 1970); it is (re)assembled through the atmospheres of the night.

DISTURBING SLEEP ONTOLOGIES: THE SLEEP MULTIPLE

Through foregrounding 'the body we do' (Mol and Law 2004: 57), we find that sleep comprises myriad material, social, normative, and affective processes that are profoundly embodied. In combination these disturb the ontology of sleep, revealing the elements of a sleep assemblage; the affective and agentic practices as captured in our concept of *sleepfulness*. This concept challenges the sleep-wake dichotomy and treats sleep not as a solid category but – to paraphrase Mol (2002) - as 'the sleep multiple'; fluid, relational, dynamic and situated. Although we draw on interview data reporting accounts of sleep, our analytic approach does not seek to unearth how the participants proactively try to get to sleep, nor focus on their personalized sleep strategies (cf Hislop and Arber 2003); instead, we examine the ontology of sleep to explore how it is amassed within networks of socio-material and affective relations. As we examine our data, sleep as a stable object begins to unravel; the sleep multiple is also evident by the variety of adjectives attached to it.

Listening to sleep talk reveals it to be a permeable, complex and messy practice. For example, as we interrogate references to 'improved sleep', we find distinctions between embodied unconscious and conscious nights are not clear-cut. Sleep as liminal, rather than dichotomous, emerges in particular in instances of (un)consciousness reflexivity. Participants describe waking themselves up when they are asleep. Trisha (012:S2) comments on how she unconsciously, yet reflexively, wakes herself up from a bad dream, relieved that she 'managed to pull myself out of the dream and I was so glad I managed to get out'. Another feature of recovery is 'using dreams'. As Kirsty (011:S2) puts it, 'I've smoked crack in my dreams and actually had a hit off it'. Melanie (001:S1) too reveals the

liminality of sleep laden with activities. She describes 'making plans for her future', and 're-rehearsing past events' while asleep. An ontological mosaic begins to emerge as we hear about numerous modes of sleep. Let us take for example Helen's (027:S1) notions of 'light sleep', 'full sleep' and 'virtually asleep' experienced during the day:

> In between meetings I'll go up and lie on the bed, have a nice heavy relax where I feel that I am virtually asleep, but I can still sort of like hear everything around me, if that makes sense. I'm a very light sleeper. I hear the slightest of noises; they don't wake me. Well they do, I suppose. They do. They don't wake me up, they don't wake me up that I'm awake, but I hear them.

This not only speaks of the liminality of sleep, but also indicates her response to the onto-normativity as indicated by her awareness that she is breaching the Centre's rules which dictate that day-time sleep is not permitted. She continues:

> A couple of times I have gone and just laid on the bed, might just be quiet because I can like not go into a full sleep, but enough to just be nice and relaxed and you know, just keep looking at the clock to make sure that I don't go into a sleep that I would be, "oh God, the bell's rang!" That has happened a couple of times maybe, though on the days when I've had headaches. (027:S1)

Helen admits that on occasions she has slipped from being 'virtually asleep' to 'full sleep' during the day, but repairs this with her to reference to headaches.

'Full', 'virtual' and 'light' are amongst a plethora of ways of doing sleep, indicating a baggy ontological mosaic: the sleep multiple. Participants speak, for instance,

of: 'alcoholic sleep', 'anxious sleep' 'broken sleep', 'comatose sleep', 'conscious sleep', 'catnaps', 'childhood sleep', 'decent sleep', 'deep sleep', 'disturbed sleep', 'dreaming sleep', 'exhausted sleep', 'healthy sleep', 'heavy sleep', 'natural sleep', 'pass out sleep', 'power naps', 'proper sleep', 'not proper sleep', 'scared sleep', 'unconscious sleep', 'unnatural sleep' and 'unwakeable sleep'. Participants reveal an intuitive knowledge of sleep as a fractured object and not a tidy category. However, within the data we also find slippage between, the presumption that there is an *a priori* 'real' and 'natural' sleep as found in the dominant discourse that presumes a bio-medicalised body.

Deidre's (035: S2) question illustrates this well. During the interview she asks the researcher:

> When I'm drinking [alcohol], is that sleep? I wouldn't have thought that when somebody has been drinking they're in what is called a natural state of sleep, so I wouldn't have thought that was sleep. And you tell me, is that sleep?

Deidre's question presumes that the researcher will have access to a definitive and authoritative answer to her question. There is, of course, a notion of 'natural' sleep within the biomedical gaze on the *body-with-organs* (Deleuze and Guattari 1988). Within that paradigm, sleep is understood in terms of brain activity and a complex interplay of neurological, biological, psychological and behavioural mechanisms that play out over the 24-hour circadian rhythm, where variations are evidence of 'abnormal' sleep (Ellis 2012: 294). And so Deidre is not alone in presuming that there is an *a priori* scientific 'truth' that can account for a biologically based 'natural sleep' that resides in the organic body. And indeed,

this bio-medicalised understanding of a 'natural' sleeps infiltrates and becomes reified within institutionalised routines explicitly designed to treat and restore it. From a social constructionist perspective, this idea of 'natural sleep' is recognised as a discursively produced rendering that, in turn, conveniently maps on to institutionalized regimens that seek to restore productive and disciplined bodies (Wolf-Meyer 2011: 880). 'Natural sleep' can therefore be expedient for service providers and residents.

'Natural sleep' can also be seen as a further infiltration of an ontonorm – the 'ought' of sleep, especially as residents accept that there is such a 'thing', and hope that 'it' will be achievable. Anna (026:S1), for example, 'craves' the day when such 'real' sleep 'just happens'; when it becomes devoid of 'things':

> I have this idea, a world of sleep, of going up to bed in a quiet room, a dark room, being nice and warm, putting your head down and that's it …

For her, a mark of natural sleep would be to sleep 'without the radio on'. But, of course, sleep will never be devoid of actants for, as she notes, there could be a bed, warmth, dark, quiet - it is still *sleepful* - but the assemblage is different to the one she experiences during her stay in the rehabilitation centre.

CONCLUDING DICUSSION

This empirical paper provides an analysis of sleep using data generated through interviews with residents in drug and alcohol residential rehabilitation services. Our study participants indicate that sleep is an issue that is important to them and with which they struggle, but it has been given little, if any, formal attention through their treatment histories. The aim of this paper is not to offer pragmatic

solutions to resolving sleep quality, but instead to provide a description of how bodies 'do' sleep in the context of residential settings. We demonstrate that participants sleep in a variety of ways and, after Mol (2002), sleep may be conceptualized as 'the sleep multiple': that is, sleep is recognized as a discrete embodied practice, but also as contingently assembled and situated. Our analysis identifies myriad material accoutrements such as, radios, baths, beds, cigarettes, drinks, roommates, phones, clocks, memories, dreams, and nighttime gatherings that reveal how sleep is a fulsome practice. This list is not exhaustive. There is still more going on besides: other 'actants', notably medication or sleeping tablets, can be in the fray of sleep. The latter are of particular interest, and it is noteworthy that most residents report a reluctance to take pills in case they interfere with their aspiration for a presumed 'natural sleep'.

The sleep assemblage is riven with tensions and contradictions. Indeed, our study finds that while our participants presume a 'natural sleep' exists, the data also expose sleep to be conceptually, ontologically and pragmatically baggy. We propose that the notion of *sleepfulness* goes someway to capturing the provisional and busy set of practices that enable what we do when we sleep. *Sleepfulness* involves (un)conscious activities and actants that are both situated and relational. We have seen here how, in rehabilitation services, there is a plethora of interconnected practices that can comprise, amongst other things, listening, tapping, crying, eating, smoking, reading, thinking, meditating, fantasying, moving, socializing, and gaming, that are associated with sleep in the fullest sense. Thus we urge sociologists of sleep not to think of sleep difficulties purely in term of sleep*lessness,* but more in terms of a sleep*ful* variety of

relational processes. This finding concurs with previous research that queries assumptions that sleep is a state of social remission, indicating that the notion of *sleepfulness* may be generalizable to other settings, although each will have their own unique environmental configurations.

As well as contributing to debates on the sociology of sleep, our findings offer empirical insights into the nighttime within drug and alcohol residential treatment settings. Structured days and nights and the imposition of routines within residential rehabilitation settings are designed to foster normative sleep. Our data reveal that these environments are perceived as 'safe' and conducive to 'better' sleep, but 'better' sleep is more provisional and cluttered than researchers might presume. For this group, 'better' is relative to their experiences of substance-induced sleep. And as we disturb how sleep is done, we find that the categorical weave of sleep untangles. The articulation of the fulsome dimensions of sleep may be helpful for researchers operationalizing sleep in other study designs, such as our own parallel research where we are seeking to develop validated patient reported outcome measures (or PROMs), including one measuring sleep quality amongst people using alcohol and other drugs (Neale and Strang 2015a; 2015b). The findings presented here have prompted us to think more critically to ensure that the sleep measure we develop will be broad enough to capture the contradictions inherent in the sleep assemblage.

This loosening of normative expectations of sleep through questioning its ontology is also political in the sense that it reminds us that the prescription of bodily practices is linked to the social spaces and wider contexts in which they

are produced. Sleep may seem personal, but it is imbued with the political (Williams 2011) in ways that can become especially salient in the context of substance dependence (Nettleton et al 2012; Nettleton et al 2013). Men and women in recovery from drug and alcohol problems bring complex embodied biographies that entwine their sleep and addiction to residential rehabilitation settings and their sleep assemblages are fragile. This fragility may well be disturbed as they relocate to other settings, where sleep has to be *(re)assembled* in different environments, most especially where they may feel less 'safe' and have to negotiate the 'real world'.

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