

The sociology of sleep and the measure of social acceleration: A rejoinder to Hsu

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Hsu's recent paper (2014) on 'The sociology of sleep and the measure of social acceleration' is a welcome addition to a growing corpus of recent writings on sleep matters within the social sciences and humanities (see Williams and Wolf-Meyer, 2013 for a recent discussion), and the relevance of these sleep matters to debates on time and society.

Sleep, as I have argued elsewhere (Williams, 2011, 2005), is both a novel *problem* for the social science and humanities in its own right, and a *prism* on to many if not most other aspects of society, past, present and future, from family life and gender relations to work and leisure, childhood and ageing, science and technology, health and medicine, capitalism and consumerism, politics and human rights.

The temporal, spatial, embodied dimensions of sleep are clearly central to all this, including the frequent positioning of sleep matters, as Hsu rightly notes, within wider discourses and debates on social acceleration and the 24/7 society – see Crary (2013) for a recent example. As a bodily matter that both *affects* and is *affected by* social acceleration, sleep is indeed 'Janus-faced', as Hsu puts it. Hsu is also surely right, given previous criticism of conjecture and hyperbole (Wajcman, 2008), about the need for a more fully developed conceptual and theoretical framework in order to empirically measure various facets and features of social acceleration, sleep related or otherwise. The suggestions Hsu puts forward in this regard as to where sleep fits into Rosa's (2003) threefold framework (of 'technological acceleration', 'acceleration of the pace of life', and 'acceleration of society as

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whole), seem plausible, productive and promising for future research in this area, although Hsu could perhaps have drawn on a wider range of sociological studies on sleep in support of his case, including qualitative research on the gendered meanings and management of sleep within and between different social groups across the life course – see Arber et al. (2007), Meadows et al. (2008), and Venn et al. (2008), for example. In emphasising the complex, discontinuous, non-linear nature of these processes, moreover, Hsu provides a timely reminder of the dangers of blanket claims and over generalisations, if not hyperbole, of the ‘social acceleration-sleep deprived society’ kind.

A number of critical points and reflexive issues remain in any and all such efforts to further advance this framework, however. It is with this in mind therefore, as a further constructive contribution to these developments and debates on the social acceleration–sleep relationship in particular, and the sleep, time and society nexus in general, that the following comments are made.

Perhaps the first critical issue to address concerns a comment I have previously made regarding progress and problems in the sociology of sleep so far, namely, that despite a growing sociological interest in sleep matters over the past decade or so, much of this sociological engagement to date has ironically been about all the things surrounding sleep or sleeping rather than *sleep itself*, thereby reaffirming rather than problematizing the predominant waking concerns of the discipline. Hsu’s paper, for all its merits, does little to redress this imbalance given some if not much of what he actually discusses returns us once again to all those things associated with or surrounding sleeping (e.g. sleep to work transition times, texting in the bedroom, mattress changing times), rather than sleep itself. So too sleep deprivation or sleep loss, which again is not strictly speaking sleep as such but its absence and its consequences such as drowsiness or (excessive) daytime sleepiness. Even when Hsu is supposedly discussing sleep itself moreover, as in data on people’s sleep quantity or quality, he neglects to mention that most of this data is at best a proxy, self-reported, post-facto measure of people’s actual sleep quantity or quality given they were, to put it bluntly, asleep at the time. Self-reported measures of sleep duration or quality may also, of course, tell us as much if not more about (changing) expectations and cultural attitudes toward sleep, within and between different social groups over time, as they do about actual sleep timings and durations – a point I shall return to again shortly below. Add to this the fact, in the case of children’s sleep, that this usually means parents’ perceptions and reports of their children’s sleep (Wiggs, 2007), and the complexities and limits of these self-reported measures become readily apparent. None of this of course is necessarily a problem

in terms of the framework Hsu advances. It does nevertheless suggest that it is not simply a question here of porous or patchy sleep data over time, as Hsu suggests, but of proxy sleep data too in the main outside the sleep laboratory or clinic. And it also therefore suggests a need for a more critical and indeed reflexive engagement with any and all such data at our disposal in the service of these issues, including their very sources and limits. Viewed in this light then, we might well concur with Hsu about the relevance of sleep matters for the social acceleration debate, albeit with some important methodological caveats and qualifications about the 'sleep' matters in question here, many of which to repeat extend far beyond sleep itself.

A second closely related matter concerns the fact that what we mean by and how we measure 'sleep' in turn of course has a critical bearing on just how 'key' an indicator of social acceleration sleep might be. There may even perhaps, returning my previous point about sleep itself, be an ironic if not inverse relationship evident here in the sense that the less our supposed 'sleep' measures actually or accurately measure sleep itself the more key or sensitive they become as indicators of social acceleration. These matters are further complicated by the fact that variations in 'sleep' over time, however measured, may also of course indicate much else besides social acceleration as such. Sleep therefore, on all these counts, may or may not be quite as good or key an indicator of social acceleration as Hsu suggests. Either way we are left none the wiser, given this predominant concept-indicator focus, when it comes to questions of causation, including the possibility of complex if not reciprocal relations between social acceleration and sleep on the one hand, and of other contributory or confounding factors in any such apparent relationship on the other hand.

Consider for example, on this latter count, the potential relationship or relationships to be more precise, between social acceleration, anxiety and sleep. Social acceleration, to be sure, may engender its own anxieties which in turn may adversely or negatively affect sleep quantity, quality or both over time. But a decline in self-reported sleep quantity or quality over time may also perhaps, in part at least, be due to public anxiety inflation given all the concern and conjecture, if not hype and hyperbole, amplified many times over through the media and popular culture, regarding social acceleration in general and sleep in particular today in the so-called 24/7 society. One of the ironies indeed of growing public concern and campaigning around sleep matters in recent decades, including the transformation of poor sleep and sleepiness into somatic 'at risk' states if not culpable corporeal concerns (cf. Gunter and Kroll-Smith, 2005), is the potential to further fuel sleep problems through public anxiety inflation in a self-defeating, sleep-depriving fashion, particularly anxiety-prone or plagued problems such as insomnia: a point not lost on some sleep experts it seems (see Horne, 2006, for instance).

To the extent moreover, returning to the problems and limits of self-reported sleep data, that this results not simply in an actual rise in sleep problems but shifting public expectations, perceptions and propensities to report sleep problems over time – which in turn of course may be class, gender and/or age related – then this surely adds a further note of theoretical and methodological caution if not complexity into any such social acceleration–sleep relationship, real or apparent, over time.

A third quite literally ‘vital’ matter returns us once again to Hsu’s point about the Janus-faced nature of sleep, or sleep *itself* to be more precise, as both *affected by* and *affecting* social acceleration. Hence, the need perhaps to think not simply in terms of social acceleration but in related more specific terms though concepts such as ‘social arrhythmia’ (Castells, 2000), ‘social jet lag’ (Foster and Kreitzman, 2004; Foster et al., 2013; Roennenberg, 2012; Wittman et al. 2006), or even perhaps ‘bioderegulation’ (Brennan, 2003; Crary, 2013). Whichever definition one favours it amounts to pretty much the same thing, namely the more or less fundamental clash, disconnect, de-synchronisation, drift or misalignment between our biological and social clocks which sleep, day in, night out, provides a vital reminder of *qua* constraint or limit, if not refusal or resistance. ‘No matter how severed from the natural cycles of day and night we have become’, Hoffman (2009: 31–32) remarks, ‘sleep continues to be stubbornly attuned to them’, the upshot being that ‘we try to prise ourselves out of our natural diurnal cycles at our peril’. Shift work is the most obvious, albeit most extreme, example of this perhaps, with its own supposed sleep disorder, so-called ‘shift work sleep disorder’. But we are all now in a certain sense, to varying degrees, ‘shift workers’ or ‘time zone travellers’ today given this drift or disconnect between biological and social time which sleep itself embodies: an era where the collective rhythms of life are now increasingly colonised if not customised, with important yet largely invisible costs and consequences for us all. Social arrhythmia or ‘drift’ in this respect meets biological ‘drag’, expressed through ‘social jet lag’, as a timely and telling embodied reminder if not collective circadian critique of the costs and consequences of late capitalism. As for what our supposedly more ‘natural’ sleep pattern is, or would be, Ekirch’s (2005) historical research is again instructive here, albeit in ways Hsu neglects to mention. There is every reason to believe, Ekirch argues, that sleep before the modern age was ‘biphasic’, ‘broken’ or ‘segmented’: a pattern, that is to say, comprising a ‘first’ and ‘second’ sleep, with a period of ‘quiet wakefulness’ in between. Whilst the flood of artificial light in the modern age, in this respect, has shifted sleep in a more consolidated, seamless, monophasic, nocturnal direction, it is also important to stress that sleep varies culturally as well as historically of course given biphasic and polyphasic sleeping cultures are

still in evidence around the world today (Steger and Brunt, 2003), despite the around the clock demands of global capitalism. To the extent moreover that napping is now undergoing something of a make-over in the advanced economies of the world today (Baxter and Kroll-Smith, 2005; Williams et al., 2013), then sleeping patterns and practices may well perhaps become ever more polyphasic in future as yet another manifestation or index of not simply a 'faster' but a supposedly ever more 'flexible' capitalism. At stake here then, to summarize, are a further series of critically important issues concerning not simply social acceleration in general but 'social arrhythmia', 'social jet lag' or 'bioderegulation' in particular and the complex ways in which sleep both affects and is affected by these very processes: vital matters indeed to do with this more or less fundamental clash or mismatch between the biological and social rhythms of life which sleep itself throws into critical relief. If sleep itself moreover, on this latter count, is only ever 'partially attuned' to the 'social', then this surely includes social acceleration too: sleep itself, in other words, as not simply a constraint on, but only a partial measure or indicator of, social acceleration, given its 'recalcitrant' nature or 'stubborn' biological attunements. Perhaps the most radical edge or implication of all this, however, is the way in which recourse to this fundamental drift or disconnect between biological and social time serves not simply as a fundamental circadian critique of capitalism *per se*, but of the manner in which, as Wolf-Meyer (2013) has recently cogently argued, capitalism has sought to *problematize* and indeed (through medicine as a mechanism of capitalism) *pathologize* other forms of sleep that fall outside its normative models of sleep and productivity. But that, of course, is another matter far beyond the scope of this brief rejoinder to address.

A fourth critical issue concerns the need perhaps for a more balanced or nuanced appreciation and appraisal of the role or roles to be more precise of different technologies within all this. Whilst technologies indeed are frequently characterised if not caricatured as disturbers, disrupters or deprivors of sleep when it comes to social acceleration and the 24/7 society, we also of course need to recognise the role of some technologies at least in facilitating or promoting, if not protecting or optimising sleep too. Consider sleeping pills, for instance, the prescription of which may well be symptomatic of life and living in these anxious if not accelerating times of ours. They are still nevertheless 'technologies of sleep', albeit technologies which, with each new generation of drugs, simultaneously embody the promise of greater control of the sleep-wake cycle, including more efficient, better quality, optimal sleep, or even perhaps, in case of wakefulness promoting drugs like Modafinil, more customised if not optionalized sleeping patterns and practices in future – see Coveney (2011, 2014) and Williams et al. (2013) for example.

The same of course may be said of information and communication technologies which also now double or redouble as technologies of sleep too. Technologies of sleep *qua* technologies of self, that is to say, which are now being developed and deployed to monitor and manage if not optimize our sleep through mobile tools and tracking devices far away from the sleep lab or clinic: what I have elsewhere recently termed the ‘m-mapping’ of sleep in the digital age (Williams et al., 2014). A number of downloadable mobile apps and digital devices indeed are now available to help us to do so, from the *Zeo* sleep manager – which, as the closest thing to sleep laboratory measurements outside the sleep lab so far, includes a headband containing sensors to record a range of EEG, EOG and EMG signals whilst asleep – to other accelerometer based devices such as *Fitbit*, *Lark Pro*, *SleepTracker* and *SleepBot* to track sleep, or sleep-related movement to be more precise as yet another proxy measure of sleep itself. It is not simply sleep itself then that is ‘Janus-faced’, but technologies too when it comes to sleep matters, including of course their own ‘*sleep mode*’ function. Perhaps the key point here for our purposes however, returning to the first point above, is less the advent of such smartphone apps and mobile self-tracking devices as such or their uptake in popular culture, significant as that is, and more their potential uses as recording devices in future social scientific or ‘biosocial’ research of the kind already discussed above on social acceleration and sleep ‘itself’.

As for future agendas, each of the foregoing issues, in my view, highlights further promising strands of work regarding the social acceleration thesis in particular and the sleep, time and society relationship in general. It is not simply however a question of the socio-temporal but the *spatio-temporal* dimensions and dynamics of sleep, as Hsu’s own comments on sleep inside and outside the home suggest. And yes we also of course, as Hsu rightly notes, need to know more, much more in fact, about the activities, technologies and expectations surrounding these areas and intervals of sleep, together with a more *context specific* approach that explores the differences *within* and *between* different social groups and contexts. Here again however we return to the role of new information and communication technologies in helping us, *qua* researchers, to do just that: to m-app these spatio-temporal sleep matters that is to say, in conjunction with other long-standing forms of data collection, both quantitative and qualitative in kind, including more avowedly causal or explanatory forms of inquiry.

Whether or not, of course, any of this translates into a normative and political stance on these matters is open to debate. Suffice it to say, continuing in this reflexive vein, that the very engagement with these issues in the social sciences and humanities, including Hsu’s own paper and this rejoinder, is itself part and parcel of the growing problematization and

indeed politicisation of sleep matters today (Williams, 2011). To the extent moreover, returning to Wolf-Meyer (2013), that these spatio-temporal dimensions and dynamics of late capitalism, accelerating or otherwise, do not simply render sleep 'problematic' for many of us today, but 'pathologize' human forms or variants of sleep that fall outside its normative models of optimal sleep and productivity, then a normative and political stance on these matters seems entirely justified if not long overdue. As to what this might involve or entail, well that again alas is beyond the scope of this brief rejoinder to address (see Williams and Wolf-Meyer, 2013 and Williams, 2013 for a further discussion of these matters).

Hsu's paper then, to conclude, is indeed a welcome addition and a valuable contribution to these debates on social acceleration through the theoretical and empirical sociological lens of sleep. It also however, as I hope to have conveyed here in this necessarily brief rejoinder, raises a series of further critical points and reflexive issues, both theoretical and methodological in kind, which are equally vital in my view to future research in this rich and fascinating new domain. To the extent that these challenges and opportunities are taken up in future research in the social sciences and humanities then Hsu's paper and this brief rejoinder will indeed have served its purpose. Time will tell...

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References

- Arber S, Hislop J and Williams SJ (2007) Editors introduction: gender sleep and the life course. *Sociological Research Online* 12(4): 19.
- Baxter V and Kroll-Smith S (2005) Normalizing the workplace nap: blurring the boundaries between public and private space and time. *Current Sociology* 53(425): 33–56.
- Brennan T (2003) *Globalization and Its Terrors: Daily Life in the West*. London: Routledge.
- Castells M (2000) *The Information Age: Economy, Society and Culture Vol 1: Rise of the Network Society*, 2nd ed. Oxford: Blackwell.
- Coveney CM (2011) Cognitive enhancement? Exploring modafinil use in social context. In: Pickersgill MD and van Keulen I (eds) *Sociological Reflections on Neuroscience*. Bingley: Emerald, pp. 203–230.
- Coveney CM (2014) Managing sleep and wakefulness in a 24 hour world. *Sociology of Health & Illness* 36(1): 123–136.
- Crary J (2013) *24/7: Late Capitalism and The Ends of Sleep*. London: Verso.
- Ekirch R (2005) *At Day's Close. Night Time in Times Past*. New York: W.W. Norton.

- Foster R, Piersen SN, Wulff K, et al. (2013) Sleep and circadian disruption in social jet lag and mental illness. *Progress in Molecular Biology and Translational Science* 119: 325–346.
- Foster RG and Kreitzman L (2004) *The Rhythms of Life: The Biological Clocks that Control the Daily Lives of Every Living Thing*. London: Profile Books.
- Gunter V and Kroll-Smith S (2005) Governing sleepiness: somnolent bodies, discourse and liquid modernity. *Sociological Inquiry* 75(3): 346–371.
- Hoffman E (2009) *Time*. London: Profile.
- Horne J (2006) *Sleepfaring*. Oxford: Oxford University Press.
- Hsu E (2014) The sociology of sleep and the measure of social acceleration. *Time and Society* 23(2).
- Meadows R, Arber S, Venn S, et al. (2008) Engaging with sleep: male definitions, understandings and attitudes. *Sociology of Health & Illness* 30(5): 696–710.
- Roennenberg T (2012) *Internal Time: Chronotypes, Social Jet Lag and Why You're So Tired*. Harvard: Harvard University Press.
- Rosa H (2003) Social acceleration: ethical and political consequences of a desynchronised high-speed society. *Constellations* 10(1): 3–33.
- Steger B and Brunt L (eds) (2003) *Sleep and Night-time in Asia and the West: Exploring the Dark Side of Life*. London: Routledge Curzon.
- Venn S, Arber S, Meadows R, et al. (2008) The fourth shift: exploring the gendered nature of sleep disruption in couples with children. *British Journal of Sociology* 59: 79–97.
- Wajcman J (2008) Life in the fast lane? Towards a sociology of technology and time. *British Journal of Sociology* 59(1): 59–77.
- Wiggs L (2007) Are children getting enough sleep? *Sociological Research Online* 12(5): 13.
- Williams SJ (2005) *Sleep and Society: Sociological Ventures into the (Un)Known*. London: Routledge.
- Williams SJ (2011) *The Politics of Sleep: Governing (Un)Consciousness in the Late Modern Age*. Basingstoke: Palgrave Macmillan.
- Williams SJ (2013) Counting sleep. *Royal Society of Arts – Journal* (issue 3). Digital version available at: www.thersa.org/fellowship/journal/archive/summer-update-2010/features/counting-sleep (accessed 10 May 2014).
- Williams SJ, Coveney C and Gabe J (2013) Medicalisation or customisation? Sleep, enterprise and enhancement in the 24/7 society. *Social Science and Medicine* 79: 40–47.
- Williams SJ, Coveney CM and Meadows R (2014) M-apping sleep? Trends and transformations in the digital age. Working paper, University of Warwick.
- Williams SJ and Wolf-Meyer M (2013) Longing for sleep: assessing the place of sleep in the C21st. – Parts I, II, III. *Somatosphere: Science, Medicine and Anthropology*. Available at: www.somatosphere.net/ (accessed 10 May 2014).
- Wittman MM, Dinich J, Mellow M, et al. (2006) Social jet lag: misalignment of biological and social time. *Chronobiology International* 23(1–2): 497–509.
- Wolf-Meyer M (2013) *The Slumbering Masses: Sleep, Medicine and Modern American Life*. Minnesota: University of Minnesota Press.