



## The Politics of Sleep

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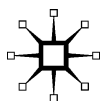
CHRONIC RESPIRATORY ILLNESS

# The Politics of Sleep

Governing (Un)consciousness  
in the Late Modern Age

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palgrave  
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*To the memory of my Dad, Alan George Williams  
(17 October 1920–31 January 2008), who lives  
on through me and my boys Jacob and Adam*



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# Introduction: The Politics of Sleep?

To speak, let alone to write, about the ‘politics of sleep’ may appear strange if not absurd. Is there indeed, one might justifiably ask, by any stretch of the imagination, a ‘politics of sleep’ we can meaningfully point to, or even expect, in the near future?

The central argument of this book is that a politics of sleep is indeed not simply possible but evident in a variety of ways. Sleep, I will argue and demonstrate, is *political through and through*. Political, that is to say, in the sense that sleep is clearly implicated and imbricated in relations of power, authority and expertise as a site and source of claims-making, if not crisis, contestation, controversy and critique. We may in this respect, as with other aspects of the body, speak of the *regulation* or *governance* of sleep and associated socio-political issues regarding the problems, promises and prospects of sleep. This, for example, includes the rights, risks and responsibilities associated with sleepy, sleeping and sleepless bodies and, in a more critical if not radical vein perhaps, the ways in which sleep, qua unconscious somatic state, constitutes not simply a vital albeit temporary corporeal release but a potentially potent site or source of corporeal protest, refusal or resistance in an increasingly relentless if not restless or ravenous age: a ‘wired awake’ world indeed we might say. In our fast, flexible, work-dominated, efficiency-driven societies, moreover, as Hoffman comments, sleep problems are no longer ‘a purely personal idiosyncrasy – a symptom,

say, of exceptional vitality or an exquisitely fine-tuned sensibility'. Sleep (disturbance) instead has become a 'widely discussed public issue, with its own institutions, statistics, ideologies and improving ideas' (2009: 29–30): a 'matter of concern' or a 'problem in the making', in short.<sup>1</sup>

To consider sleep in this way, then, invites or encourages us to reflect upon the complex regulatory fields that govern not simply our waking but our sleeping lives as another problem or facet of power, politics and personhood, both past and present. My use of the term 'politics', as this suggests, is intentionally broad and wide-ranging, extending far beyond the formal political sphere or familiar references to the sleep-deprived lives of those weary or bleary-eyed politicians, to encompass many issues which, on closer inspection, turn out to be not simply political but *biopolitical* in character: *vital* political matters, that is to say, to do with the governance of *bodies* and hence the politics of *life itself* (cf. Rose 2007; Rabinow and Rose 2006; Foucault 1991). If sleep after all is another vital part of life, then its governance unsurprisingly perhaps is biopolitical through and through, particularly in the neo-liberal if not bio-liberal era where life itself is subsumed and capitalised upon in a multitude of ways as yet another asset or value.<sup>2</sup> At once a material or (neuro-) physiological matter, an arena of social, scientific and medical management, a locus of affective/emotional and inter-subjective power relations, and a powerful and potent cultural metaphor (Steinberg 2008), sleep, as we shall see in the pages that follow, is an amorphous, ambiguous, mutating phenomenon that is dispersed, deployed, deciphered, discussed, detailed, documented and debated in multiple ways, in multiple sites and settings, for multiple political ends and purposes. Sleep, moreover, doubles as both a *problem* and *prism*, a *site* and *source*, of political

power relations and investments in the late modern age: a matter of growing concern today, that is to say, both personally and publicly, but also a frame of reference or point of articulation and amplification for the mobilisation of a variety of other concerns and anxieties about life and living in contemporary society, including issues of risk, stress, insecurity, injustice, time paucity or time poverty.<sup>3</sup>

A politics of sleep nonetheless, at one and the same time, throws up some intriguing tensions, paradoxes or contradictions. For all its ubiquity and universality, for instance, or maybe by virtue of this ubiquity and banality, sleep has no obvious political constituency beyond perhaps various patient or professional causes or campaigns of a concerted or collective kind. Rather it tends, rightly or wrongly, to be regarded as a largely 'private', 'personal' or 'individual' matter – themselves of course socio-historically constructed and contested terms of reference – and hence of little or no obvious political significance. Something we all do, in other words, but that is about all given that we tend to be asleep at the time! Consciousness-raising about an explicit lack of consciousness, moreover, as Summers-Bremner (2008) wryly notes, is not without its own ironies or contradictions.

At stake here then, we might say, are a variety of structural and ideological forces, which at first glance *conspire against* any explicit, obvious or full-blown politicisation of sleep, not least the *devaluation* and *privatisation* of sleep. Yet these very processes, I shall argue, are themselves of course deeply political and hence open to critical reflection, if not reversal or resistance. To the extent, moreover, recalling the previous notion that many sleep problems or concerns regarding sleep are not simply a *product* of society, but a *prism* or point of articulation and *amplification* for a range of other fears, worries, frustrations and anxieties regarding contemporary

life and living, then talk of the politics or politicisation of sleep may not seem quite so absurd, fanciful or far-fetched after all.

To date it seems this bio- or socio-political landscape can be traced along two main axes or dimensions and characterised in terms of two main agendas, themselves of course comprising many different strands or variants on these themes. First, what might be termed the *dominant: sleep-negative* agenda (or *negative* agenda for short), expressed through numerous *sleep-negating* or *sleep-neglecting* ideas and ideologies, discourses and debates, policies and practices. This, for example, includes both the *absence* of any sustained or serious attention to sleep matters – the power evident in what is *not* said and done about sleep matters, in other words – and the multitude of ways in which sleep, as another vital aspect of the disciplinary matrix of bodies, is more explicitly denounced, dismissed, devalued and/or downsized. In both cases it is the conscious rational waking dimensions of life, and associated mandates or motifs of (self-) mastery, containment and control, which prevail or predominate over corporeal matters such as sleep. Sleep in effect, like other aspects of the body such as emotion and desire, provides yet another powerful and potentially troublesome or problematic corporeal reminder of the limits of rational modernity, which in turn, paradoxically, further fuels or redoubles attempts to ‘discipline’, ‘contain’, ‘control’ or ‘rationalise’ it. To the extent moreover, that these dominant sleep-negative or sleep-neglecting discourses and practices also serve, in the late modern age at least, to individualise and privatise sleep, or to otherwise render it a matter of little or no significance or importance, then they may also be regarded, to repeat the point made earlier, as political attempts to depoliticise sleep.

In response to this dominant or sleep-negative agenda, however, we may also now point to a second growing and altogether more *concerned: sleep-positive* agenda (or *positive* agenda for short), in which sleep is both *problematized* as matter of concern on the one hand given the costs and consequences of poor sleep for society, and *championed* on the other hand through a variety of *sleep-positive, sleep-promoting* or *sleep-friendly* ideas and ideologies, discourses and debates, policies and practices. This, for example, encompasses a variety of expert agendas, including those found in contemporary sleep science and sleep medicine today and popularised through the media and the proliferation of self-help literature, which serve to transform or translate sleep in one way or another into both a personal and public matter of concern and a prime opportunity for intervention or improvement of various kinds, if not something to be colonised, commercialised or capitalised upon through a burgeoning sleep industry which now includes everything from sleep clinics to mattresses, bedding and soporific CDs for that 'perfect night's sleep'.

The contemporary politics of sleep then, as this suggests, may in part at least be envisaged as a series of ongoing struggles, tensions and attempted resolutions or reconciliations between these two main sleep-negative and sleep-positive agendas; struggles, tensions and attempted reconciliations, that is to say, at both the micro level of individual bodies and the macro level of the body politic, and between corporeal needs on the one hand and corporate or late capitalist imperatives on the other.

To this, however, we may add a series of other newly emergent agendas more *independent: critical-reflexive* agendas, in which the social sciences and humanities now constitute a leading edge.<sup>4</sup> This of course is not to imply these previous

two agendas are devoid of any critical edge or element. The 'sleep-positive' agenda, for example, may in part be read as a critical response to the 'sleep-negative' agenda. I term these more recent agendas 'independent' and 'critical' nonetheless in the sense that they do not simply bring other important concepts and perspectives within the social sciences and humanities to bear on the sleep/society nexus, but do so in ways which, at one and the same time, critically engage with yet go far beyond these previous two agendas. A case, in other words, of opening up other important perspectives, values, viewpoints, vistas, voices regarding the sleep and society nexus and the problems, prospects and possibilities of sleep as a socio-political matter. This for example, as my opening remarks on the politics or biopolitics of sleep suggest, includes critical explorations and interrogations of the contested nature and status of sleep today in late capitalism and contemporary risk society; the multiple ways in which sleep is governed in the neo-liberal age or era; questions of sleep, power, inequality and injustice; the social shaping/implications of science and sleep medicine; the biomedicatisation of sleep and colonisation of everyday/night life; and the charting if not the championing of 'resistance' of various kinds to these contemporary forms of governance and control as a further important dimension, if not an altogether more radical or rival expression of the (corporeal) politics of sleep in the present or near future.

To the extent furthermore that some of these more recent engagements with sleep and society have also sought to position themselves in more or less explicit ways through critical commentaries and debates on the past and present neglect of sleep matters within the social sciences and humanities to date, then they too involve varying degrees of *reflexivity* – hence the term 'critical-reflexive' agendas



above. This in turn, however, alerts us to another important fact regarding the role of the social sciences and humanities in these socio-political agendas on sleep and society, both past and present. It is not solely or simply a case in other words, as this more reflexive stance suggests, of these latter day more independent 'critical' and/or 'reflexive' engagements with sleep and society on the part of the social sciences and humanities, important and welcome as they are. A critical-reflexive stance also brings to light the ways in which the social sciences and humanities, through their past and present neglect, dismissal or devaluation of sleep matters and their privileging or prioritisation of the conscious waking if not rational dimensions of social and cultural life, are themselves to all intents and purposes silent partners, if not active participants or accomplices in the dominant sleep-negative agendas described above. To the extent furthermore, continuing in this reflexive vein, that certain strands of work on sleep and society within the social sciences and humanities, either now or in the future, share common assumptions or problematics with other expert agendas on sleep matters, or seek to ally or align themselves in some way or other with sleep science or sleep medicine through forms of collaborative or complementary research, then they too perhaps may best be regarded as part and parcel of the more 'concerned: sleep-positive' expert agendas described above.

The upshot of this therefore is clear. The social sciences and humanities do not, unsurprisingly perhaps, stand outside these relations of power, authority or expertise regarding sleep and society, even in their neglect or dismissal of sleep matters. They are instead we might say an essential part of the very production, or co-production to borrow a much favoured term in science and technology studies

(STS) today (Hackett et al. 2007), of the field in question, including of course *this very book itself on the 'politics of sleep'*: a reflexive point of no small significance and one I intend to exploit to good effect in the pages that follow as a further contribution to these debates – see also Smith (2007) on the role of reflexivity in the human sciences and the 'creation of human nature'.

These different socio-political agendas or problem spaces regarding sleep and society are schematically represented in Table 1.

The politics of sleep then, to repeat, is complex, contested and multifaceted, including as this suggests the dynamic role of the social sciences and humanities themselves in these very problems, prospects and possibilities.

My strategy in this respect, drawing on a range of arguments and evidence throughout the book, will be to trace and track, document and decipher, those actual and potential, explicit and implicit, direct and indirect ways in which sleep is being or has become increasingly politicised in the late modern age. In doing so, I seek to put further flesh on the bones of my argument that sleep is a thoroughly political and politicised matter. This moreover, I shall argue, in keeping with the foregoing reflexive point, includes the multiple roles of the social sciences and humanities in these very processes, discourses and debates and the pasts, presents and futures to which they speak.

Some caveats or disclaimers are in order perhaps at the outset. If the foregoing sketch of sleep as another important site and source of political mobilisation and investment is correct, then this of course begs important questions of the historical past as much as the present, if not of presents or futures yet to come. My focus in this respect on the *contemporary* politics of sleep in the late modernity, and associated

**Table 1** The politics of sleep: a schematic outline or problem space

Position	Agendas	Examples
1. <i>Dominant:</i> <i>sleep-negative</i>	Neglect/dismissal/ devaluation of sleep; privileging/prioritisation of conscious, rational waking life; commitment to dominant (Western) ideals/values of corporeal discipline, self-mastery, containment/control.  Emblematic expressions (and embodiments): 'No time to sleep'; 'sleep is for wimps' (Margaret Thatcher/Thomas Edison).	Contemporary work- time, work-culture, work-ethics; advent of the '24/7 society'/'wired awake' world; globalisation.
2. <i>Concerned:</i> <i>sleep-positive</i>	The costs and consequences of poor sleep for society; championing of sleep (in response to dominant: sleep-negative agendas); management of sleep problems; promotion of sleep-friendly policies and practices within society.  Emblematic expressions (and embodiments): 'The sleep deprived/ sleep sick society'; 'the promise/pleasure of sleep'; 'Adopt a sleep- smart lifestyle' (William Dement).	Sleep experts; sleep alerts, polls, surveys, campaigns (e.g. NSF); sleep labs/clinics; (workplace) napping facilities; 'tiredness kills – take a break' motorway signs/ prosecution of (recklessly) drowsy drivers; self-help literature on sleep/ burgeoning sleep 'industry'.

Continued

Table 1 Continued

Position	Agendas	Examples
3. <i>Independent: critical-reflexive</i>	<p><i>Critical</i> engagements with past/present trends and transformations, discourses and debates on sleep and society (including agendas 1 and 2 above) – may or may not involve a <i>normative</i> stance on these matters.</p> <p><i>Reflexive</i> awareness/analysis of own role in these emerging discourses and debates on sleep and society and their socio-political and ethical implications.</p>	<p>Recent scholarship within the social sciences and humanities on sleep and society.</p> <p>For example: The governance of sleep(iness) (Kroll-Smith and Gunter 2005; Brown 2004)</p> <p>Sleep rights, roles, power relations and (gender) inequalities (Arber et al. 2007a, b)</p> <p>Socio-cultural and historical dimensions of on sleep (e.g. Brunt and Steger 2008; Ekirch 2005).</p> <p>Social shaping/implications of sleep science/medicine; biomedicalisation of sleep and the colonisation of the everyday/night life (Williams et al 2009; Wolf-Meyer 2008; Kroker 2007; Moreira 2006; Williams 2005).</p>

issues to do with the politics of the future, is largely pragmatic given my own particular interests, preoccupations and disciplinary spheres of expertise. It also, however, rests upon and reflects what I take to be a *growing* or *increasing politicisation* of sleep, both directly and indirectly, in

recent decades, or at the very least a significant *reconfiguration*, *refashioning* or *reformulation* of political discourses and debates regarding sleep in these contemporary times of ours, involving important elements of both *continuity* and *change* with the past.

The predominant focus of the book, for similar reasons, is also, though not exclusively, Western. To speak of sleep in the so-called 24/7 era or wired awake world, nonetheless, begs important questions regarding *global* trends and transformations, which alongside some comparative materials on sleep in the Asia and the West, are taken up and addressed throughout the book in the chapters that follow.

A third point concerns the eclectic theoretical stance or theoretical eclecticism of the book. To the extent, for example, that the issues to be discussed in the pages that follow revolve around the governance of sleepy/alert bodies in the neo-liberal age or era, and the broader questions and issues this raises about the contemporary politics or biopolitics of sleep, then a Foucauldian analysis or stance clearly has its merit. This, for instance, beyond a general emphasis on the productive nature of power relations, includes attention to the role of expertise in regulating subjectivity; analysis of risk as a socio-political technology in the production of the 'at-risk' self; the manner in which subjects are not simply subject to various policies and programmes but required to actively participate in them as good citizens and enterprising selves (cf. Rose 1996, 1992, 1990; Miller and Rose 1990); and finally a recognition of the complexities, negotiations, subtleties and micro relations of power, spanning both rational and non-rational elements, which in turn serve to remind us, as Petersen puts it, that 'any project of governance is always incomplete and partial in respect of the objects and practices it governs' (1997: 203). Power relations

then, from this perspective, involve diffuse, diverse, dispersed and dynamic investment strategies, including the ability of subjects not simply to know or come to think of themselves in particular ways, but to manage or self-regulate themselves and their conduct, including their own risks and behaviours, in new, novel or enterprising ways (Rose 2007, 1992, 1990; Rabinow and Rose 2006).<sup>5</sup>

I also nonetheless, given the challenges, complexities and multiplicities involved in charting or tracing the politics of sleep and the limits of any one perspective in fully or adequately doing so, draw on a variety of other perspectives and approaches throughout the book, including phenomenological approaches to the lived body; recent sociological work on the negotiation of sleep rights across the life course; elements of social and political thought on questions of rights, vulnerability, (in)equality and (in)justice; strands of work at the interface between science and technology studies (STS) and medical sociology on the social shaping/social implications of sleep science and the biomedicalisation of society; and finally, at the broadest and most general level, various other contemporary sociological theories and debates on the contours and dynamics of contemporary capitalism, risk society and late or liquid modernity. This, to be sure, leaves me open to potential criticism on various counts, not least regarding the undoubted philosophical (i.e. ontological and epistemological) tensions or problems involved in any such theoretical eclecticism.<sup>6</sup> To the extent nonetheless that a strategy of this kind opens up different avenues or entry points on these complex multifaceted issues concerning the politics of sleep, then it clearly has its merits. To the extent, moreover, that we are at a relatively early stage in theorising these sleep and society relations, including the politics of sleep, and to the extent that my

intent, in this book at least, is precisely to chart or explore these issues from a variety of different angles, perspectives or viewpoints, rather than attempt some sort of grand and premature theoretical synthesis or integration of these different approaches and perspectives, then a pragmatic or plural theoretical stance of this kind undoubtedly has its merits as well as its drawbacks. Given the limited work on sleep, let alone the 'politics' of sleep, within the social sciences and humanities to date, in short, and given the complex if not contested or contradictory nature of sleep itself, keeping our theoretical options open may well be a wise move, or to put it the other way around, foreclosing them may well be unwise at this particular juncture or point in time.

A final point concerns the role of sleep science and sleep medicine within all this. There is to be sure, as we shall see, a powerful argument to be made here that sleep, as a bio- or socio-political matter, is 'everywhere' today because 'knowledge' of it has increased courtesy of sleep science and sleep medicine, particularly in the information age or era where expertise of all kinds 'travels', so to speak, far beyond its original anchor points or institutional confines. On this, of course, I wholly concur and do not dissent. Rather than start with the sleep laboratory or sleep clinic, however, and then move 'outwards' into the broader realms and vistas of society, I have chosen instead to spell out where sleep science/medicine fits into the unfolding political or biopolitical storyline towards the end of the book as a further commentary, or series of critical reflections, if you will, on what has gone before and what indeed may be around the corner in the near or not-too-distant future. To the extent, moreover, to repeat, that the politics of sleep is rich, complex, multi-sited and multifaceted, extending far beyond the reach or

remit of sleep science or sleep medicine, even in the information age, then approaching or framing things in this way undoubtedly has its merits as well as its drawbacks.<sup>7</sup>

Five chapters follow in taking these issues forward and charting these many facets and features of the contemporary politics of sleep in all its richness and complexity.

Chapter 1 sets the scene for the book as a whole by placing or locating sleep within the context and contours of late or 'fast' capitalism. Attention is paid, in doing so, to charting and exploring the changing nature, pace, tempo and dynamics of life and living in contemporary society in general, and associated discourses and debates about its costs and consequences for sleep, or lack of it, in particular. The chapter, as such, provides a preliminary or provisional sketch of the problematisation and politicisation of sleep 'loss', 'debt' or 'deprivation' in contemporary society, including relations between sleep, work time, work culture and work ethics; the location of sleep within contemporary risk culture; and related socio-political matters to do with the multiple associations between sleep, risk and the politics of anxiety. This therefore, at an early stage in the proceedings, enables me to put further flesh on the bones of my argument, as outlined above, that the politics of sleep, however nascent or embryonic, involves or entails a dual point of reference in which sleep doubles or redoubles as both a problem in its own right and a prism or point of articulation/amplification for the mobilisation of a wide variety of other concerns and anxieties about life and living in the contemporary late modern era, if not the 'go faster' or 'non-stop' world of global capitalism.

Chapter 2, following directly on from these previous concerns and considerations, moves us to closely associated moral and political issues to do with the governance of



alert/sleep(y) bodies in contemporary society, particularly questions of citizenship, vigilance, virtue and the politics of culpability or blame. At stake here, I argue, is not simply the remaking or refashioning of sleepiness as a culpable corporeal condition or blameworthy soporific state, but the associated recasting or revaluation of sleep itself in altogether more positive or productive terms as the aid or ally rather than the enemy of contemporary corporate capitalism. Sleep as such, recast or reconfigured in this fashion, becomes the duty, ethic and responsibility of each and every one of us in the service of both personal and public goals or goods, values or ideals, including hopes, dreams or visions of the 'well-slept' citizen and the 'well-slept' society. The chapter in this respect casts further critical light on the multiple relays and relations between the aforementioned 'concerned' political agendas regarding sleep and predominant/prized neo-liberal values and corporate ideologies of enterprise and efficiency if not enhancement or (self-) improvement in all walks of life, both inside and outside the workplace.

Further critical moral and political questions come sharply into view in Chapter 3, which takes a closer look at the *rights and wrongs of sleep*, both locally and globally. Key issues here, for example, include the contested nature and status of sleep rights across the life course, relations between autonomy, sleep and the 'just' society, the 'dark face' or 'dark side' of sleep deprivation in the guise of interrogation or torture, and related matters to do with sleep, vulnerability and *bare life*. Sleep, as this chapter clearly attests, may very well be a great 'leveller' to which we all sooner or later succumb, regardless of status, rank or position, but it also constitutes another profoundly important, yet neglected or invisible, dimension of social inequality,

insecurity and injustice: something, qua basic human need and basic human right, which at once unites and divides us, both publicly and privately, locally and globally.

Chapter 4 in contrast focuses on another vital dimension to the politics of sleep in which corporeal questions of unconsciousness and unruliness, transgression and taboo, dormativity and normativity loom large. These issues are explored from a variety of angles, including phenomenological explorations of sleep and other liminal or partial states of consciousness, the policing of dreams, the spatialisation and co-mingling of dormant/deviant bodies and the politics of the night. Sleep from this viewpoint, I argue, provides something of a double corporeal point of reference as both 'limit' and 'excess'. A corporeal 'limit', that is to say, in relation to conscious waking life in general and the rapidly escalating if not excessive demand and dictates of contemporary life and living in particular; and a corporeal state of unconsciousness if not unruliness which, by virtue of this very fact, exists beyond and hence 'exceeds' the bounds or 'limits' of conscious waking life and the dreams, desire or delusions of rational modernity. The chapter as such may be read as a further corporeal exploration of the powers of sleep and hence the complexities of contemporary forms of governance, including the prospects or possibilities of corporeal protest or resistance of various kinds, both past and present, public and private.

The final chapter, as already noted, completes the storyline and fills in the missing pieces through a focus on the role of sleep science and sleep medicine within all this. Key issues covered here, for example, drawing on strands of both science and technology studies and medical sociology, include the *transformation* of sleep into an 'object' of scientific or technoscientific inquiry during the course of the

twentieth century, its *translation* into a 'problem' within the modern-day sleep clinic, the shifting or blurred boundaries between *therapy* and *enhancement*, and the multiple relays or relations between medical, corporate and popular culture in the governance of sleepy/alert bodies today in the name of public health and safety, productivity and performance, wisdom and well-being, diligence and virtue. The chapter in this respect, to repeat, brings to the fore and spells out in explicit fashion themes largely implicit in previous chapters concerning the critical roles and relations between *biomedicine*, *bioscience* and *biotechnology* in the politics or *biopolitics* of sleep in contemporary society, and related questions to do with the very nature and status of sleep itself as an ambiguous, morphing, mutating phenomenon which is endlessly reworked or reconfigured as a problem or matter of concern within the diverse circuits and settings of the sleep laboratory, the sleep clinic and the shifting or blurred boundaries between public and private life. It also, in closing, rehearses various alternative possible futures regarding sleep, taking the military as a case study or exemplar, including both futures present and futures yet to come, in which sleep may, or may not, become a relic of the evolutionary past.

A brief Afterword follows in which I revisit and restate the central arguments of the book concerning the problems, prospects and possibilities of a politics of sleep, both now and in the near future, including the role of the social sciences and humanities within these discourses and debates. Sleep, it is argued, in its manifold guises, is a prime site and source of controversy and concern, contestation and critique: both a *problem* and a *prism*, to repeat, regarding life and living in these late modern times of ours. In these and countless other ways, I conclude, sleep is not simply

political through and through, but likely to become *increasingly politicised* in the (near) future, as interest in sleep matters continues to grow both inside and outside the bedroom, the workplace, the clinic, the laboratory and the academy, and attempts to hold on to or reclaim sleep in some way or other converge, compete or clash with attempts to render it ever more 'optional' if not 'obsolete' in an era seduced by a renewed ethic of enterprise, cultural imperatives towards wakefulness and the lure or temptation of (biomedical) enhancement.

## Notes

1. My use of the term 'matter of concern' here is first intended in a commonsensical, simple or straightforward fashion, to denote the multiple ways in which sleep is coming to matter today, or better still being made to matter today, in all walks of life both inside and outside the laboratory or clinic: a problem in the making, to repeat. It also of course recalls Latour's (2008, 2004) own more 'technical' rendition, as he himself puts it, of these matters in terms of the distinction he draws (as a shorthand for 'the huge sea change between two empiricisms – the first and the second') between 'matters of fact' and 'matters of concern'. 'A matter of concern', in this latter sense, 'is what happens to a matter of fact when you add to its whole scenography, much like you would do by shifting your attention from the stage to the whole machinery of the theatre' (2008: 38). See Wolf-Meyer (2008), for example, for a recent Latourian rendition of these 'matters' in relation to 'sleep, signification and the abstract body of allopathic medicine'. See also Chapters 1, 2 and 5 of this book in particular for further elaborations of these matters of concern.
2. See Rabinow and Rose (2006), for example, for a useful recent discussion of biopower today, including their own Foucauldian stance vis-à-vis the likes of Hardt and Negri (2000) and Agamben (1998). Biopower, Rabinow and Rose conclude, focuses attention on three key elements, namely: 'knowledge of vital life processes, power relations that take humans as living beings as their object, and the modes of subjectification through which subjects work on themselves qua living beings – as well as their multiple combinations' (2006: 215). See also Bull (2007)

on vectors of the biopolitical and Massumi (2002) on the 'subsumption of life under capitalism' – a term which Dickens (2000) also deploys to good effect, albeit from a somewhat different angle or vantage point.

3. This of course is not to dismiss or discount the sleep 'problems' people experience and articulate in their everyday lives, or the broader discourses and debates on sleep as a matter of concern in contemporary society. It does, however, alert us to the way in which these very articulations of sleep 'problems' may also serve, at one and the same time, as vectors or vehicles for the mobilisation of a variety of other concerns and anxieties that may or may not have much to do with sleep 'problems' as such, but which are nonetheless framed in this way through the discursive rendering of sleep 'problems' as a matter of personal and/or public 'concern'. See Chapter 1 for a further elaboration of this point.
4. See Williams (2008, 2005), for example, for recent reviews of progress, problems and prospects regarding the sleep and society nexus within the social sciences and humanities.
5. A case, in other words, as Massumi (2002) appositely puts it, not so much of an extrinsic relation of power from outside and over us but of a power which 'in-forms' us, such that in learning to follow its contours and its constraints we are, in effect, 'following ourselves' – the corollary being that we cannot easily or readily 'run away' from it either.
6. Shilling (2003), for example, takes Turner (1992) to task on precisely these sorts of counts regarding attempts to theorise body–society relations from a range of different perspectives or viewpoints.
7. My aim here, in other words, is to steer a cautious and considered path between the Scylla of underplaying the sleep science/sleep medicine story and the Charybdis of over-stretching its explanatory reach or frame of reference. See, for example, on this latter count, Smith's (2009) recent review of Kroker's (2007) book *The Sleep of Others and the Transformations of Sleep Research*. While Kroker, Smith notes, undoubtedly writes a convincing 'biography' of the sleep laboratory and the socio-historical transformations contained therein, in moving 'outwards' from these specific claims about transformations of sleep research, to claims about 'the *being* of sleep' – claims, that is to say, about wider transformation in the meanings of sleep and dreams in the 'centuries before and the social places beyond' – his 'conceptual framework does not serve' (Smith 2009: 110).

# 1

## Restless Times: Wired Awake in *Fast* Capitalism?

### Introduction

Any attempt to grasp or grapple with the politics of sleep in the contemporary developed world today needs to place these issues in the context of broader social, cultural, economic and political trends and transformations during the closing decades of the twentieth century and the opening decade of the twenty-first century.

In this opening chapter, therefore, we take a critical look at the contested nature and status of sleep, or lack of it, within contemporary society, with particular reference to issues of *continuity* and *change* in the *temporal regimes* of working life and living in the so-called era of *fast* or *flexible* capitalism and associated issues concerning relations between the politics of sleep, risk and anxiety in the late modern age.

At stake here, in other words, is a series of key questions, the answers to which set the scene or context for the book as a whole and themes and issues that follow. What are the implications of contemporary forms of work and leisure for our sleeping as well as our waking lives, for example? Are we all trading on 'dangerous' levels of sleep 'debt' or 'deprivation', for instance, as some claim? Is sleepiness, moreover, now being reconfigured or refashioned as an 'adverse',

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'dangerous', 'problematic' or 'at-risk' state, and if so with what consequences? And what finally does all this tell us, as a first or preliminary pass, if you will, about the problematisation or politicisation of sleep in the late modern age?

Sleep, as we shall see, is indeed a contested or controversial matter in these 'restless' if not 'relentless' times of ours, at once both a *problem* or matter of concern in its own right, and a *prism* or point of articulation for the mobilisation of a range of other concerns and anxieties about contemporary life and living in the late modern age. It is to these changing contours and contexts of life and living in late or fast capitalism, therefore, that we now turn in search of sleep, so to speak.

### **Acceleration: a 'time-squeezed/go-faster' world?**

Life, it seems, is speeding up. Everything apparently is accelerating in this time-squeezed, go-faster world of ours, so we are told. This is an era that goes by or trades under various names such as 'late', 'light', 'liquid', 'flexible' or 'post-Fordist' capitalism (see, for example, Bauman 2000; Giddens 1991; Harvey 1989; Martin 2000, 1994), but one characterised, among other things, by *speed* and the associated reworking or *reconfiguration of time/space boundaries*.

On this perhaps we may all more or less readily concur. Life for many if not most of us does indeed seem to be accelerating these days. We seem to be busier than ever before, with more to do in less time, in an increasingly restless if not relentless, frantic if not frenetic era, which leaves us feeling more or less tired, wired or just plain worn out. Even social and cultural commentators and critics concerned with the analysis of these trends and transformations struggle, it seems, to keep up with them. Agger's

(2004) book *Speeding Up Fast Capitalism*, for example, as he readily acknowledges, was written as a sequel to his previous book *Fast Capitalism* (1989), given capitalism by his reckoning had become *even 'faster'* since the 1980s, particularly in light of the rapid pace and development of new (faster and faster) information technologies in the Internet age and global era.<sup>1</sup>

To speak of 'fast' capitalism in this respect, Agger (2004) argues, is to highlight at least two important interconnected or interrelated ways in which capitalism has been modified, particularly over the past two decades or so and into present-day or early twenty-first-century capitalism. The first involves the *compression of time and the quickening pace of everyday life* in the face of new economic imperatives and forms of social control. The second pertains to the *erosion of boundaries* which are 'effaced by a social order bent on *denying people private space and time*' (Ibid.: 4, my emphasis). The key factor underpinning these two senses of the adjective 'fast' (i.e. acceleration and erosion of boundaries), Agger suggests, is *instanteity*; we expect things ever more quickly, instantly even, at the snap of our fingers or the click of a mouse, including 'fast food, fast cars, fast bodies, fast work, fast reading and fast writing' (Ibid.: 5).<sup>2</sup> This *instanteity* in turn engenders potentially new *global dimensions to contemporary experience* in the 'wired' world, thereby further contributing to these 'disembedding' processes and 'de-boundarying' effects through the compression of time and space as communication and information accelerates, and our sense and sensibilities are further rewired or reconfigured in the global age or era (cf. Giddens 1991; Harvey 1989): an 'invasion of home and head', in effect, 'by cultural imperatives delivered by advertising and the media' (Agger 2004: 9).



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It is certainly true that a new *intensity* seems to characterise or accompany this instantaneity of contemporary life and living both inside and outside the workplace, an intensity at once both *structural and ideological*, based on transformations in the *globalised* capitalist economy which themselves are understood and experienced if not justified through appeals to neo-liberal notions of 'enterprise', 'freedom', 'flexibility', 'freewill' and so on in which we are all somehow expected to be '(more) available', to work 'faster' and/or 'longer', and generally to 'do more in less time'. A world, in short, characterised or predicated on a new air or ethos of 'busyness' as a badge of honour, pride or a sign of value (Gershuny 2005), and new norms of 'having too much to do', especially among the professional and managerial sectors of the economy (Widerberg 2006: 115).

Hopes or dreams of a 'leisure revolution' or 'surplus of free time' tied to economic progress and technological change have, in this respect, failed to materialise or all but disappeared. Instead, transformations in work-time relations – such as the shifting boundaries of work and social life, the drive toward greater efficiency and competition in the global economy, neo-liberal shifts in governmental policies, and associated trends such as the deregulation of working time and the weakening of trade unions – appear to have 'halted the long-term trend of reduction in full-time working hours' (Chatzitheochari and Arber 2009: 31; see also Wainwright and Calnan 2002; Green 2001; Kodz et al. 1998).

These trends and transformations, for example, are clearly evident in the United Kingdom, which at the time of writing still has the dubious honour of being the only EU member state to retain the right for exemption (via an opt-out agreement, first won by John Major in 1993) from the 1993

European Working Time Directive (EWTD) which set the upper weekly limit for full-time paid work at 48 hours. This is a position the British government continues to defend despite various EU challenges to or rulings regarding this exemption (see also Chapter 2). Britain indeed is renowned for its 'long hours culture', with over a quarter of employees working over 48 hours a week, especially among men at *both ends* of the occupational spectrum (Chatzitheochari and Arber 2009: 31; see also Warren 2002). A large proportion of the British population, moreover, according to Kreitzman, believe they are 'overworked, and that life is out of control' (1999: 25).

It is not, however, as already noted, just working *time* which is at stake here but the concentration and *intensification* of work – a broad trend it seems across most sectors of the economy or workforce since the mid-1980s (Wainwright and Calnan 2002; Green 2001) – and associated trends such as the decline in job tenure or increase in *job insecurity*, particularly in the wake of the recent economic downturn. A recent UK survey commissioned by the mental health charity Mind (2010), for example, found that one in four employees dreaded going back to work the next day due to the pressures people are under in the current economic climate, with high rates of unpaid overtime, and almost all the people surveyed saying they were unhappy with their work/life balance (McVeigh 2010).<sup>3</sup>

Unpaid workloads associated with domestic and child-care activities also, of course, weigh heavily in the balance sheet here, leaving employed individuals, particularly working mothers, less time for other pursuits and pastimes – a 'second shift' (cf. Hochschild 1990) in effect, resulting in a further 'time-squeeze' or 'time-bind' (Hochschild 1997) from paid work and family responsibilities that is clearly

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gendered (Chatzitheochari and Arber 2009; Venn et al. 2008). 'Time paucity', 'time poverty' or a lack of 'discretionary time', as a consequence, appears to be a growing problem for many people today in advanced countries across the globe (see, for example, Goodin et al. 2008);<sup>4</sup> the implication being that 'temporal autonomy' is a basic measure of individual freedom and that for some, as Hoffman notes, 'time has become a more valuable and less attainable commodity than money' (2009: 11–12).

These trends, to be sure, are important. The pace or tempo of life does indeed, to repeat, appear to be accelerating, quickening or speeding up for many if not most of us today in the advanced minority world. Caution nonetheless is clearly needed with respect to any such broad brush or unqualified portrayal of this global 'go-faster', 'speeded-up' or 'runaway' world. This, for example, as Thrift (2008, 2000, 1997, 1996, 1995) rightly notes, includes the danger or risk of a crude, overly simplistic technological determinism, or the lack of other important points of *continuity* or *challenge* to any such trends (see also Wajcman 2008).<sup>5</sup> To the extent, moreover, that speed itself is in part a 'cultural creation' if not a rhetorical resource (i.e. a 'rhetoric of "speedy" things'), then this itself depends upon the 'depiction of certain places, things and people as slow-moving' (Thrift 2008: 63). In particular, it may be argued that this greater awareness of movement has in turn produced a set of resources that enable us to separate out a 'present-oriented stillness, thus promoting a "*politics*" based on *intensified attention to the present*' (Ibid.: 64, my emphasis). This, for example, includes a host of cultural practices associated with quiet contemplation, which 'distil or concentrate time', and other technologies and body techniques or practices which 'stretch out the moment' and 'expand the

size of consciousness', thereby allowing each moment to be 'more carefully attended to' and which, taken together, may be viewed as constructing a 'slow-down perception, as much as a speed-up' (Ibid.: 65). Boredom furthermore, qua discourse and experience, remains a distinct possibility if not a characteristic feature of modernity to the present day. In a time, in other words, where the:

drive to novelty and innovation, speed and progress that have always defined modernity become the foundation of a process of continuously accelerating transformation, *boredom haunts the Western world...* as both cause and effect of this universal process – both as the disaffection with the old that drives the search for change and as the *malaise produced by living under a permanent speed-up*. A symptom, then, of modernity, this experience without qualities, an adaptation at once visceral and intellectual to life in a world where nothing stays put, to an era in which the idea of transcendent meaning seems hopelessly old-fashioned. (Goodstein 2005: 1–2, my emphasis)

Contemporary culture then, as this suggests, involves important elements of *continuity* as well as *change* in relation to any such trends and transformations in the pace or tempo of life in late or fast capitalism. This, moreover, includes multiple acts of 'slowness', both individual and collective in kind, which are not so much, Honoré comments, about a 'backlash' as about finding the right sort of 'balance' in a fast-paced world, and might even embrace or encompass the possibility of doing things quickly while maintaining a 'slow frame of mind' (2004: 15), of which more in the next chapter of this book.<sup>6</sup>

## **Debt: no time to sleep?**

It is in this context of continuity and change in the temporal rhythms, routines and regimes of contemporary capitalism and its global reach that sleep in general, and sleep 'debt', sleep 'deprivation' or sleep 'loss' in particular, comes to the fore as a critical yet neglected issue or matter of concern which itself provides a further vantage point and embodied expression, if not critique, of prevailing socio-cultural, political and economic imperatives that privilege or prioritise alert wakefulness and valorise vigilance. 'Wakefulness and the wired world go together', in other words, as Summers-Bremner comments, with the 'expansion of the 24-7 economy into more and more lives, and more of each life' (2008: 131).

Sleep-deprivation, therefore, according to various experts, commentators and campaigners, is a widespread and growing problem in contemporary society; a casualty, symptom or victim of the wired world, that is to say, the costs and consequences of which have yet to be fully counted. A number of sources may be pointed to in this respect, some more credible than others. Dement (1999) for example, an eminent American sleep expert, claims that: (i) people now sleep on average 1½ hours less each night than they would have a century ago; (ii) there is an 'epidemic' of sleep deprivation in our midst; and (iii) most people in advanced industrialised countries, as a consequence, are walking around with an accumulated 'sleep deficit' of between 25 and 30 hours.

A litany of supposedly 'sleepy' people are pointed to or singled out for attention in this regard, including sleepy drivers, pilots, doctors, parents, children, teachers and politicians, all of which it is claimed represent a risk or danger

not simply to themselves but to others and to society at large through this lamentable soporific state of affairs.

Politicians, in particular, are frequently criticised on this count as 'poor role models' given a macho political culture where sleep is seen as for 'wimps' (epitomised in the Thatcher era) and sleep-deprivation treated as a sign of dedication, drive or devotion to the cause (see Table 1). When it comes to the list of famous insomniacs, indeed, then 'care-worn politicians loom large', as Summer-Bremner (2008: 129) wryly remarks. Awakeness 'beyond the degree expected from the general population', she continues, 'is endemic to contemporary governance' (Ibid.), albeit with the important rider that greater alertness or vigilance is required on the part of us all these days of course in contemporary *risk* culture or risk society (cf. Beck 1992; Giddens 1991), of which more shortly. Consider, for example, a recent article in the *Guardian* newspaper (Barkman 2008), in the midst of the financial crisis/credit crunch, entitled 'Sleepless in SW1'. 'The financial crisis', it is noted, 'is keeping politicians', such as Alistair Darling and Gordon Brown, 'from their beds with rounds of all-night meetings'. But 'Is this wise?' it then proceeds to ask. 'How much sleep deprivation can anyone take before their judgement takes a fall?' (Ibid.).

The recent British election campaign was also something of an eye opener on this count, quite literally. This, for example, included desperate last-ditch attempts on the part of the main party leaders to drum up potential votes in the last 36 hours prior to polling day. Cameron, for example, the Conservative Party leader and subsequent Prime Minister in the new coalition government, undertook a punishing 36-hour schedule, including visits to night-workers at an engineering plant in Lancaster, fishermen on the night-shift

in Grimsby and supermarket staff, bakers and paramedics in Bristol, while also apparently 'grabbing some sleep' in the back of the campaign bus between visits 'in a bid to stay fresh in the run up to polling day' (*Channel 4 News* 2010).

As for the costs and consequences of this stinting on or selling ourselves 'short' of sleep, these it is claimed are borne both individually and collectively, including various large-scale accidents, catastrophes or national disasters such as the Exxon Valdez oil spill, the Challenger space shuttle disaster, and the Chernobyl nuclear meltdown (see Moore-Ede 1993, for example).<sup>7</sup> Sleep-related accidents, as this suggests, are costly on many counts. Even when expressed in purely financial terms indeed, these costs and consequences quickly escalate or multiply. Mitler et al. (2000), for example, estimate these costs to be in the region of \$56 billion each year in the United States alone, excluding lost productivity, medical illness or shortened life span.

Many of these discourses and debates, however, are North American in origin. Is this then, we may justifiably ask, a distinctly American crisis, or problem 'in the making', so to speak? Certainly, there is plenty of campaigning or lobbying about sleep-related matters in North America, through bodies such as the National Sleep Foundation ([www.sleepfoundation.org](http://www.sleepfoundation.org)), which conducts an annual 'Sleep in America' poll to help both document the extent of sleep problems among the American public and raise the profile of sleep as a matter of public concern. The executive summary of the NSF 2005 Adult Sleep Habits and Styles Poll (NSF 2005), for example, informs us *inter alia* that:

- on average, adults in America are sleeping 6.8 hours a night on weekdays and 7.4 hours a night on weekends. Overall, adults in America report sleeping an average of 6.9 hours a night when considering both weekday and weekend sleep.

- a significant proportion of the respondents (40%) report getting less than 7 hours of sleep a night on weekdays. About seven in ten adults (71%) are getting less than 8 hours of sleep a night on weekdays.
- over the past several years, there has been a downward trend in the proportion of respondents who report sleeping 8 or more hours a night on weekdays (from 38% in 2001 to 30% in 2002 and 26% in 2005).<sup>8</sup>

North America has also, of course, as will be more fully discussed in Chapter 5, been at the forefront of sleep science and sleep medicine over the past half-century, thereby helping raise the profile of sleep as a matter of concern in contemporary society still further. Sleep-deprivation nonetheless, according to a variety of studies and sources, is a widespread and growing problem in many if not all advanced industrial societies and 24-hour economies in the global age or 'wired' world. Martin (2002), for example, drawing on studies in countries as diverse as Australia, Sweden, Poland, Finland, France and Japan, concludes that 'overall' it is safe to say at least 'one in ten adults in the general population (you, me and the people next door) are currently affected by moderate or severe daytime sleepiness. Some scientists believe the situation is much worse, with up to one in three adults suffering from significant sleepiness' (Ibid.: 20).

These findings in turn are echoed and amplified in other specially commissioned public surveys and popular opinion polls. A recent Demos report, for example – tellingly entitled *Dream On – Sleep in the 24/7 Society* (Leadbeater 2004) – finds (on the basis of a specially commissioned MORI poll<sup>9</sup>) that:

- 39 per cent of British adults say they 'do not get enough sleep'
- sleep deficit/deprivation is most concentrated in the 25–54 age bracket (i.e. those of working age who are likely to have family



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- responsibilities); among managers and white-collar workers (51%) and full-time workers (49%)
- self-reported consequences of sleep deprivation included irritability and shouting, mistakes at work and behind the wheel, and falling asleep at work
  - key sleep disrupters identified were children (reported by 41% of parents), worry at work (15% of managers) and noise (Leadbeater 2004).

Similarly, *Insomniac Britain – Does Anybody Sleep Here Anymore?* – a report by the British Association of Counselling and Psychotherapy (BACP 2005)<sup>10</sup> – claims that ‘the nation is “sleep deprived”’, based on further survey findings that:

- people report they only get on average 6 hours 53 minutes of sleep per night
- 12+ million people in Britain (27% of the adult population) experience at least three bad nights’ sleep in an average week
- there is a ‘night-time gender divide’ – women are significantly worse sleepers than men.

Caution nonetheless is once again required here regarding many of these claims about sleep and society. Horne (2006), for example, highlights a number of important points in response to both current evidence and assumptions of a ‘(chronically) sleep-deprived society’, including: (i) the limits of historical comparative data regarding the quality and quantity of sleep; (ii) the problem of asking people about their sleep; and (iii) the costs versus benefits of encouraging people to get more sleep.

With respect to the first of these issues, for example, the partial or patchy historical data available make firm claims about either the quantity or quality of our sleep relative to our ancestors at best difficult and at worst impossible

in anything other than the most general or broad terms. It may very well be indeed, as Ekirch (2005) rightly notes, that the *quality* of our sleep has improved over time – through, for example, better housing, heating, bedding, pain relief and the like – even if, and it is still a big ‘if’, its *quantity* has declined. Many people today indeed, as Klug posits, ‘can hardly imagine the various threats our medieval ancestors were exposed to in the dormant part of their lives, given the warmth and security of modern day centrally heated bedrooms and our safely locked if not gated houses or apartments’ (2008: 33). (See also Cox (2008) on the perils and potential of sleep in the eighteenth century.)

Caution too is clearly needed on this historical count in relation to current claims about our so-called long work-hours culture. The picture indeed, unsurprisingly perhaps, is more complex than this on closer inspection, depending on sector or occupation, and the time period in question. Generally, nonetheless, working hours have declined over time, even if work intensification, as noted above, has increased since the mid-1980s (Wainwright and Calnan 2002; Green 2001).

As for self-reports of sleep-deprivation, these too of course are potentially problematic on a number of counts. While ‘tiredness’ and ‘sleepiness’, for instance, are clearly separate states, they are frequently equated or conflated in everyday life (see, for example, Widerberg 2006). These meanings in turn are likely to be gendered and to differ according to other sociological or socio-demographic factors such as class, occupation, education and age (Williams et al. 2010; Meadows et al. 2008a; Arber et al. 2007a, b; Meadows 2005). Just because people say they are ‘tired’ or ‘sleepy’ or not getting ‘enough’ sleep, moreover, does not necessarily mean

they need 'more' sleep or therefore, as a corollary, that more sleep would be a worthwhile investment of their time compared to other possible investments such as more exercise, for example (Horne 2006). Individual sleep 'needs', furthermore, are known to vary considerably, while any such self-defined sleep 'shortage' or 'deficit' may be as much a *product of perception* as it is of actual time spent asleep (Williams 2005).

Most available evidence anyway, Horne (2006) notes, seems to show that people actually get 7 to 7½ hours per night which, depending on quality, the majority of sleep experts would probably deem to be adequate for most healthy adults.<sup>11</sup> The UK 2000 Time Use Survey (ONS 2003) indeed points to a fairly constant 8 hours per night for adults until people get into their 60s, when it begins to rise to an average of 9 hours, with women on the whole appearing to sleep longer than men, particularly in the 30–60 age range<sup>12</sup> (see also ONS 2006).<sup>13</sup> Similarly, a recent international OECD survey recorded an average sleep time across all OECD countries surveyed of 502 minutes per night, or 8 hours 22 minutes, with France topping the table at 530 minutes per night compared to Korea with the lowest average sleep time of 469 minutes per night, just 11 minutes short of 8 hours (Cartwright 2009; OECD 2009).

Sleep then, as this preliminary discussion suggests, is indeed a contested issue or matter within contemporary society. Something, that is to say, which is becoming increasingly problematised if not politicised through discourses and debates regarding sleep loss, debt or deprivation as an 'adverse' or 'at-risk' state, for self and society, and hence a matter of concern.

## **Anxiety: sleep as problem and/or prism?**

It is precisely at this juncture that further pertinent questions come to the fore concerning relations between the politics of sleep, risk and anxiety in contemporary culture and society. To what extent, for example, as a consequence or corollary of these discourses and debates, are people becoming or made to feel increasingly anxious about their sleep? To what extent, moreover, are sleep problems themselves a symptom or expression of broader cultural concerns and anxieties about life and living in contemporary society? And perhaps most importantly of all for our purposes, what does this tell us about discourses regarding sleep 'problems' themselves?

As to the first of these questions, the aforementioned discourses and debates on the costs and consequences of sleep (debt/deprivation) for both self and society, certainly runs the risk of *anxiety inflation*. Consciousness-raising campaigns or public alerts, for example, may not only sound like a contradiction in terms when it comes to sleep, they may also, paradoxically or unintentionally, *promote or fuel the very sleep problems they are designed to alleviate* through the concerns and anxieties they engender regarding sleep (Horne 2006). The last thing an insomniac needs, for example, is a further reason to worry about their sleep! This, of course, is not to belittle, discount or devalue the possibility that calls or campaigns of this kind may result in a better-rested if not well-slept public, populace or citizenry. It does nonetheless introduce an important note of caution with respect to any such campaigns or public alerts of this kind, however well intentioned.

The aforementioned construction of sleep loss, debt or deprivation as an 'adverse', 'at-risk' or otherwise

problematic state, nonetheless, is itself of course part and parcel of a broader landscape or proliferation of risks in contemporary society (Beck 1992; Giddens 1991),<sup>14</sup> which not only compete or clamour for attention but *engender their own particular or peculiar anxieties, fears, uncertainties*, if not outright states of panics or paranoia, with potentially important implications once again for our sleep (or lack of it). Fear and anxiety, indeed, appear to be characteristic if not predominant affective states in contemporary society. We have long since, for example, according to writers such as Furedi (2005), been ‘enveloped’ in a ‘culture of fear’ as an ‘ever expanding part of life’ tied to the multitude or explosion of risks we now face – from GM food, BSE, prospective flu pandemics or the health dangers of mobile phones, to ‘stranger danger’, potential acts of terrorism, energy security, climate change or global warming and other environmental disasters – with ‘scaremongering’ increasingly represented as the act of a ‘concerned and responsible citizen’ (Ibid.: vii–viii) – see also Booker and North (2007).

Scare stories, however, Furedi (2005: ix) argues, do not simply make people more anxious or fearful, they also ‘reinforce existing apprehensions and help to shape and even alter the way that people conduct their lives’, including the parenting or ‘paranoid parenting’ of their children (Furedi 2002). Once the mindset of fear prevails, in other words, ‘it creates a world where problems and difficulties are inflated’ and fear, panic or paranoia are driven by a ‘self-fulfilling dynamic’ (Furedi 2005: xi).<sup>15</sup> This, moreover, as we shall see in the next chapter, contributes in no small part to ever-renewed efforts at *vigilance* which in turn are based upon and underwrite a heightened alertness in all walks of life as the active duty and responsibility of all good citizens.

While a distinction is frequently drawn in this respect, for psychological or psychiatric purposes, between fear and anxiety – the former considered a more specific or immediate state and the latter a more generalised, free-floating or diffuse state – it is clear nonetheless, as Bourke (2005: 191) rightly notes, that any such differences ‘oscillate wildly’ in socio-historical time, with ‘anxiety easily converted into fear’ and vice versa. The uncertainty of anxiety, for example, can quickly be converted into more focused fears through the cultural and political process of naming an enemy or scapegoating (Ibid.). The conversion of fear into more diffuse anxiety states may also serve social and political ends or purposes given that anxiety states tend to promote withdrawal and tighter forms of individual bodily control (cf. Douglas 1992, 1970), unlike fear states which are more likely or liable to draw people together (Bourke 2005: 191). It is no coincidence, moreover, Bourke astutely comments, that the very word ‘anxiety’ became more popular as the twentieth century progressed, given the ‘modern construction of the unique self residing “within” the body and accessible to psychotherapeutic confession’ which ‘prioritises the language of anxiety’ (2005: 191).

Viewed in this latter light then, it is not simply a question of the anxieties associated with sleep, including potential anxiety inflation through sleep awareness or sleep promotion campaigns, but of *sleep problems themselves as symptoms or expressions, products or reflections of the age of anxiety*, and all that this implies. Consider, for example, the aforementioned BACP *Insomniac Britain* report, which concludes that:

We are prosperous but live in an *anxiety society*. General anxiety and the *excessive pace of modern life* are felt by the

highest proportion of the population to affect the quality of their sleep. We view this as evidence that the broader trend toward 'Anxiety Society' is *penetrating our sleeping life* and acts as a *barrier to peaceful sleep* for many. (2005: 1, my emphasis)

This in turn, however, returns us to the final critical question raised above regarding the cultural *framing* of sleep in this way. Sleep problems, to be sure, may well be very real for those who experience them, of that there is no doubt, but the sleep 'discourse' nevertheless, if we may call it that, may itself be partial, problematic or at the very least far from adequate. Are we talking about sleep, for example, because it is a convenient cipher, metaphor, *surrogate* or *substitute* way of talking about or framing other things such as anxiety, fear, stress, worry, frustration, pessimism, insecurity, inequality or injustice (Williams 2005), and associated issues to do with the changing dimensions and dynamics of lived time? Like the stress discourse, moreover, these discursive articulations or configurations of sleep may themselves in part reflect and reinforce other socio-cultural changes prevalent in contemporary times such as the heightened awareness of vulnerability if not victimhood and the rise of a therapeutic culture or state (Wainwright and Calnan 2002).<sup>16</sup> Sleep, in this respect, as both discourse and experience, becomes yet another critical *point of reference or articulation for the mobilisation of a variety of other concerns and anxieties about life and living in contemporary times*, including the stresses and strains of work and family life (Hinsliff 2004), associated feelings of time paucity or time poverty, and the multiple risks and uncertainties which clamour for attention if not beset us on all sides.

## Conclusions

Sleep, we may safely conclude, is indeed a contested matter in the global age and the 'wired awake' era of go-faster or turbo-capitalism. This, for example, as we have seen, includes ongoing discourses and debates as to the extent of sleep debt or deprivation in society and associated concerns over the personal and public costs and consequences of poor sleep as an 'adverse' or 'at-risk' state. Sleep, moreover, I have argued, may be viewed as both a problem in its own right and a prism or point of articulation for the mobilisation of a variety of other concerns and anxieties about life and living in the late modern age, not least the changing character and dynamics of (lived) time and the multiplication of risks and uncertainties. Sleep indeed one might say is very much a 'problem in the making' today, around which a variety of claims and concerns converge, compete, clash or clamour for attention.

We may in this regard, returning to the differing socio-political agendas sketched in the introduction to this book, view these issues in terms of an ongoing tension between the dominant ideologies and imperatives of late or fast capitalism and the global economy on the one hand, which continue to neglect or negate sleep, and other recent discourses and debates which, at one and same time, render sleep a matter of growing 'concern' if not a 'crisis' today and therefore 'champion' sleep through a variety of sleep-positive or sleep-promoting discourses and debates, policies and practices: what I termed the 'concerned' or 'sleep-positive' agenda.

To the extent, however, that states such as 'busyness' or having 'too much to do', if not feeling 'tired', 'exhausted', 'sleepy' or just plain 'wasted', are normal if not banal features of contemporary life in the global economy or wired awake



world, and to the extent that the 'hectic' nature and pace of modern-day life and living is described as 'exciting' or 'positive' (Widerberg 2006: 109), or justified in the name of 'freedom', 'flexibility' or 'freewill' (cf. Maasen and Sutter 2007; Martin 2000, 1994; Rose 1990), then this at once confirms both the warrant or mandate for these latter day 'concerned' or 'sleep-positive' agendas and the problems and difficulties any such agendas face given the continuing power of these dominant sleep-neglecting or sleep-negating ideologies and imperatives. It tends to be assumed, as Summers-Bremner astutely comments, that 'our desire is of the same order as that of the global economy, which is voracious and can turn itself to any object', the net result being a '*vexed wakefulness and a volatile ambivalence*' (2008: 138, my emphasis). To the extent, furthermore, that we remain reluctant or unwilling to acknowledge let alone embrace the *corporeal limits* to which sleep speaks,<sup>17</sup> and to the extent that the causal chain or link between personal sleep problems and these broader public, structural and ideological factors remains obscure or at least difficult to articulate (Ibid.: 137–8), then any attempt to challenge or problematise these dominant late capitalist values and ideologies through other more sleep-positive, sleep-friendly, sleep-smart or sleep-wise agendas are likely to have only partial or limited success.

These struggles or tensions nonetheless, at one and the same time, should clearly not be overplayed. To the extent, for example, that these latter more concerned or sleep-positive agendas seek to emphasise the power and promise of sleep as a boost to productivity and performance, both inside and outside the workplace, and to the extent that in so doing they subordinate sleep to the very same logic, ethos or ethic of essential if not enhanced efficiency and productivity from which sleep problems themselves arise

in the first place (Hoffman 2009), then this suggests important points of convergence or compatibility rather than contestation or conflict between these agendas, as corporeal needs are reconciled or realigned with corporate values and neo-liberal imperatives in the governance of sleepy/alert bodies – of which more in the next chapter. It is surely no coincidence moreover that lack of sleep itself is now commonly described through terms with distinctly capitalist overtones, as notions such as sleep ‘debt’ or sleep ‘loss’ suggest.

Here then we return once again to other more critical and reflexive agendas regarding the contemporary politics of sleep in which the social sciences and humanities themselves play a leading role. To the extent moreover that sleep constitutes not simply a temporary release or remission from our everyday roles and a vital opportunity to recharge, rejuvenate or revitalise ourselves ready for the day ahead (i.e. sleep as preparation), but a potential source of corporeal refusal, renunciation or resistance in a world of rapidly escalating demands and dictates (i.e. sleep as corporeal protest),<sup>18</sup> then we glimpse here in principle if not practice the outlines of an altogether more radical if not romantic or utopian politics of sleep: a resistant or reclaimed politics of sleep in short, as a final frontier of sorts, given the corporeal ‘limits’ to which sleep speaks in an increasingly restless or relentless if not ravenous or voracious, time-hungry, ‘go-faster’ world.

These are issues I shall return to and elaborate upon more fully throughout the book. The chapter in this respect, to repeat, is best read perhaps as a first pass or preliminary exploration of the politics of sleep today in all its complexity and contradictions, the multiple facets and features of which form the subject matter of the chapters that follow.

## Notes

1. See Castells' (2000/1996), for example, for a sustained sociological analysis of the 'information age' and the 'network society' – a new 'techno-economic system' of 'informational capitalism', in his view, including new forms of 'timeless time', facilitated by new information technologies and 'embedded in the structure of network society' (Ibid.: 464). Thrift (2005) also usefully refers here to a new phase of 'knowing capitalism' in which 'capitalism has begun to consider its own practices on a continuous basis' and hence started to 'make business out of, thinking the everyday' (Ibid.: 1). See also Massumi (2002) on this new phase of capitalism and the associated transformations of power and control which he succinctly summarises in terms of power no longer embodied in the 'billy club of the policeman but the bar code or the PIN number' as 'checkpoints' rapidly multiply and society becomes an 'open field' of 'thresholds' and 'gateways'; a continuous space of 'passage' and 'flows'.
2. See also Tomlinson (2007) on 'the condition of immediacy', which, he argues, has become a 'core feature of control' in the twenty-first century, given the combination of fast capitalism and media technologies which saturate everyday life. Like Agger (2004, 1989), therefore Tomlinson takes seriously the notion that: (i) 'acceleration rather than deceleration has been the constant leitmotiv of cultural modernity', and; (ii) 'the sense of living a "faster life" is not a sort of anthropological constant of generational succession, but a contingent state of affairs: a genuine and significant shift in temporality that occurs and accelerates specifically in modern societies' (2007: 1). Virilio's (2000, 1991, 1986/1977) hypermodern writings on *perpetually increasing speed* or *dromology* – defined by Virilio as the 'science (or logic) of speed' derived from the Greek term *dromos* meaning to race (1986/1977: 47) – are also of course relevant here, though I do not seek to elaborate on them at length in this book. See Armitage (2000), for instance, for a critical appraisal of Virilio's work.
3. Of the 2000 people surveyed in the Mind study, 70 per cent also said that they felt 'dread and apprehension' the day before going back to work following time off. Mind therefore is calling on employers to improve working conditions, including a 'reclaiming' of staff lunch breaks. See also Campbell (2010), for example, for other recent coverage in the news of how Britain's 'binge working culture is taking its toll', particularly in the new economic climate where jobs are at risk and demands in the downsized workplace are rapidly escalating.

4. Goodin and colleagues' (2008) study usefully explores comparative time use data from the United States, Australia, France, Germany, Finland and Sweden. In doing so they show how well-being depends as much on the amount of time as the amount of money people have at their disposal or discretion, and how this 'temporal autonomy' or control varies significantly between different countries and according to differing living conditions within countries.
5. Time compression, Wajcman (2008) reminds us, has multiple dimensions and the effect of technological devices is not simply one of acceleration. These relations between technological innovation and changing time processes moreover are reciprocal and merit far greater empirical specification, in Wajcman's view, in order to distinguish social science from science fiction.
6. For other contemporary writings in praise of slowness see, for example, Kundera and Asher (1996), and much further back in time Russell's (2004/1933) *In Praise of Idleness*. See also Hoffman (2009) for a recent critique of any such incipient 'worldwide movement' or 'challenge' to the 'cult of speed' (cf. Honoré 2004). In the context of contemporary acceleration, Hoffman states, citing Connolly's (2002) *Neuropolitics: Thinking, Culture, Speed* approvingly, projects aiming for:

a return to earlier forms of temporality become even more untenable, calling for a sort of collective equivalent of psychic regression, or at least living in the past. Moreover, the costs of reactive slowness in productivity and economic competitiveness are too high... In a world riven by 'asymmetries of pace', fast time trumps slow time every time. (2009: 167–8)
7. Ongoing federal investigations into the recent Deepwater Horizon oil rig disaster on 20 April 2010 which killed 11 people are also instructive on this count, given recent evidence which seems to suggest that the sleep of workers for once was prioritised over other safety concerns or considerations as vital warning systems on the rig were apparently switched off 'to help workers sleep' (Pilkington 2010).
8. See also other NSF Sleep in America Polls on: *Sleep and Ageing* (2003); *Children and Sleep* (2004); *Teens and Sleep* (2006); *Women and Sleep* (2007); *Sleep, Performance and the Workplace* (2008); *Health and Safety* (2009) at: [www.sleepfoundation.org/article/sleep-america-polls/](http://www.sleepfoundation.org/article/sleep-america-polls/).
9. The Demos study involved a MORI poll of a representative sample of 1006 British adults interviewed by telephone in June 2004.
10. The BACP (2005) survey involved a nationally representative sample carried out by ICM Research of 1008 British adults interviewed on

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26 and 27 January 2005. See also the previously mentioned MIND (2010) study findings regarding the effects of recession on sleep patterns.

11. A recent systematic review and meta-analysis of sleep duration and all-cause mortality, for example, concludes that both short- and long-sleep duration are significant predictors of death in prospective population studies. For those sleeping 6–8 hours per day, however, no adverse effects were found (Cappuccio et al. 2010).
12. The UK Time Use Survey (ONS 2003), admittedly, is far from unproblematic in terms of sleep duration estimates and is liable to *overestimate* sleep duration, recording as it does ‘sleep’ from duration of ‘time in bed’, which therefore includes ‘trying to sleep’ and ‘lying awake’ (Chatzitheochari and Arber 2009). Once again, however, this simply underlines the need for caution regarding much of the evidence both for and against sleep-deprivation at present.
13. A smaller-scale Time Use Survey in 2005 (ONS 2006), conducted as part of the National Statistics Omnibus Survey, records an average of 527 minutes (8.78 hours) of sleep per day for men, and 546 (9.1 hours) for women. Overall, the survey reports, three main activities (sleeping, working and watching television and videos/DVDs or listening to music) account for more than half the day (13 hours and 38 minutes out of 24 hours), with about one-third of the day spent on sleeping. At the weekends, moreover, time not spent at work or in school is taken up by an increase in sleep and an increase in domestic work and leisure activities (ONS 2006).
14. Risk, according to these authors, becomes a pervasive feature of life and living in late modern or reflexive modernity. Not only does modernity create risks through our current ways of living, working, systems of production, consumption, transport and so forth, it also seeks to compensate for them by means of calculation and political regulation (Beck 1992). The profiling of risks, in this respect, becomes an important means of ‘colonising the future’ (Giddens 1991). Risk nonetheless involves many imponderables and uncertainties given that its locus lies in the future. It also, therefore, at one and the same time, exposes the limits of modern systems of authority and expertise: a ‘dialectical relationship’, in Beck’s (1992) terms, of ‘expertise and ‘counter expertise’. See also Douglas (1992) for a cultural theory of risk and blame, and the next chapter (Chapter 2) of this book on sleep, virtue and the politics of blame.
15. Instructive comparisons and contrasts may be drawn here, in this respect, with other work on moral panics (Cohen 2002/1972); epidemic psychology (Strong 1990); panic bodies (Lupton et al. 1995;

Lupton 1994; Kroker et al. 1990; Kroker and Kroker 1988); and the 'shock doctrine' (Klein 2007).

16. Relations between sleep and stress are themselves, of course, complex if not contradictory. Sleep problems, for example, are a commonly reported symptom of (work) stress (Hinsliff 2004). Sleep loss or sleep-deprivation itself, however, also seems to manifest or mimic the same physiological changes as stress such as raised cortisol levels in the body (Åkerstedt 2004, 1995; World Health Organization 2004). While stress, moreover, is something we can all more or less readily identify with in contemporary times, it is also (like the sleep discourse) the subject of much controversy and debate. (See, for example, Wainwright and Calnan 2002; Williams 2005.)
17. We cannot after all, as Summers-Bremner (2008: 138) states, have sleep 'restore our energies if we are unwilling to embrace the original limit to capability to which its restorative power belongs'. Sleep moreover has its 'own phases and its own temporality. Its relation to our world is *one we cannot fully master*' (Ibid., my emphasis).
18. Hoffman's remarks are also once again instructive here. 'No matter how severed from the natural cycles of day and night we have become,' she notes, 'sleep continues to be stubbornly attuned to them' (2009: 31). The struggles and problems associated with shift-work and jetlag, for instance, suggest that 'we try to prise ourselves out or our natural diurnal cycles at our peril' (Ibid.: 32).

# 2

## Vigilance and Virtue: Sleep, Citizenship and the Politics of Blame

### Introduction

If sleep, as the last chapter suggests, is now becoming a matter of concern in late or fast capitalism, and if sleep debt or deprivation is now being recast or refashioned as an adverse or 'at-risk' state, then further important questions arise here of course to do with associated matters of accountability, responsibility and blame in the governance of sleep today. To what extent and in what ways, for example, are we rendered increasingly accountable, responsible or culpable for our sleep as well as our waking lives today, and how precisely, if so, does this relate to broader socio-political and moral questions of vigilance and virtue, citizenship and the public good?

It is to these very matters therefore that we now turn. The chapter in this respect, taking a broadly Foucauldian and Deleuzian line on these matters, sheds further important light on the governance of alert/sleepy bodies and the complex relations between these contemporary modes of governance and the dominant values and ideologies of our times, particularly those associated with corporate or enterprise culture and neo-liberal values and imperatives.

The wise or prudent management of sleep in 'good' or 'due measure', I will argue, is now becoming the active duty and civic responsibility of each and every one of us qua responsible citizens given the costs and consequences of poor sleep for society. Another vital aspect of the governance of bodies, that is to say, through a more or less continuous processes of self-inspection and control, such that the wilful or wanton neglect of sleep is now equally worthy, like the corporeal excesses and self-indulgent pleasures of 'too much' sleep, of outright condemnation, correction and control. To the extent, moreover, that sleep is now increasingly valued through practices such as (workplace) napping as an aid or boost to productivity and performance and a smart low-cost route to success, particularly in those cognitively rich sectors of the economy, it resonates with prized neo-liberal values in which corporeal needs and corporate imperatives are once again ever more closely aligned in the management of life both inside and outside the workplace.

**Sacrifice and salvation: 'Early to bed,  
early to rise, makes a man healthy,  
wealthy and wise'**

Our starting point here, returning albeit briefly to the historical past, concerns the multiple associations, in words and deeds, between sleep, time, wealth, wisdom and moral virtue. The above well-known proverb, 'Early to bed, early to rise, makes a man healthy, wealthy and wise',<sup>1</sup> for instance, captures and conveys many of these material and moral issues and associations, both past and present, which converge and coalesce around the disciplines of the body in one way or another as a sign or source of both secular and spiritual salvation.



These disciplines of the body, of course, pre-date the modern period and have long been in existence in monasteries, armies and workshops, for instance. The seventeenth and eighteenth centuries nonetheless, as Foucault (1979) reminds us, were a significant turning point in European societies as far as the history of such methods are concerned. At stake here in effect was a transition from the disciplinary use of time in its traditional (monastic) form based on principles of 'non-idleness' (in which wasting time was 'counted by God and paid for by men'), to a far more positive economy concerned with how one could 'capitalise' on the time of individuals and organise 'profitable durations' in terms of the 'maximum speed and efficiency' (Ibid.: 154).<sup>2</sup>

Protestant writings at this time, as Weber (1974/1930) emphasises, were dominated by continual, passionately preached virtues of hard work and unrelenting physical and mental toil in one's 'calling' as the surest proof of genuine faith and spiritual salvation: the most powerful conceivable lever, in Weber's view, for the expansion of that attitude in life which he termed the 'spirit of Capitalism'.<sup>3</sup> Implicated in puritan doctrines in which time-wasting was the first and, in principle, the worst or deadliest sin, and embodied in a new form of 'possessive individualism' which created a culture dedicated to hard work, bodily asceticism and the transformation of the human environment (Turner 1993a), sleep was now part of a new economy in which time, recalling Franklin, was money and 'loss of time through sociability, idle talk, luxury ... even more sleep than is necessary ... six to eight hours, is worthy of absolute moral condemnation' (Weber 1974/1930: 157–8). While time in this respect, as noted in Chapter 1, may now for some have become more valuable than money (Hoffman 2009), this itself perhaps is expressive or symptomatic of a culture in which these older

values and ideologies are not so much replaced as *reworked* in the newly configured contexts and circumstances of late or fast capitalism where the character of lived time is changing dramatically.

The disciplining of sleep nevertheless, as already noted, is clearly bound up with more than simply economic value – in which time is money and less time for sleep equals more time to be productive – however important an historical reference point this may be. It is also of course part and parcel of a wider moral economy of bodies, both past and present, which involve, express, embody and exemplify age-old corporeal themes or struggles between self-indulgence and self-control, self-mastery and self-sacrifice, if not salvation. These sentiments and struggles, moreover, as Steger (2008) reminds us, can be found in both Eastern and Western traditions of religious, social and political thought and practice, including both Confucianism and Buddhism, where the desire to sleep has to be suppressed in line with other bodily needs or desires such as the desire to eat, drink or have sex (see also Richter 2003; Steger and Brunt 2003).

The phenomenon of early rising is particularly instructive on this count, both individually and collectively. The demand to rise early indeed, Steger (2008) notes, has been reported throughout the course of human history in many parts of the world, including Europe, India, China and Japan. Both nationally organised early-rising movements in the first half of the twentieth century and current ‘early-bird’ activities in Japan, for instance, claim to provide a ‘bouquet of merits’, including ‘health, wealth, wisdom, happiness and even beauty’ (Ibid.: 233). The key reason for early rising nonetheless, Steger stresses, is to learn to *suppress or control one’s bodily desires, feelings and inclinations*.

By 'overcoming' inclinations towards 'weakness' or 'laziness' and dealing with 'hardship', moreover, one is said to gain 'positive energy': a particularly powerful or potent method of 'cultivating the body' by means of early rising, that is to say, which has been used by religious faiths around the world for centuries (Ibid.). In Japan furthermore, from the early twentieth century:

nation-wide government-controlled organisations such as the *hōtokukai* and *seinendan*, have worked with early-rising activities in order to *increase patriotic sentiments and achieve national goals of economic advancement and military power*. It is thus no coincidence that nation-wide initiatives to encourage early rising have re-gained momentum at a time when Japanese leaders have worked towards increasing love for their nation. (Ibid.)

The 'disciplining' of sleep, then, as this suggests, is intimately bound up not simply with issues of work time, work culture and work ethics, but also with the control, suppression or transcendence of bodily needs and desires in the service of broader moral or spiritual, individual or collective, personal or patriotic goals and values, both past and present.

### **Accountability and blame: drowsiness as the new drunkenness**

Sleep nonetheless, however construed or constructed, remains a vital bodily need or corporal matter. Sooner or later, as we all know, we need to sleep. Without adequate sleep, moreover, our performance, let alone our well-being, will suffer.

One may point in this respect, as a further facet of the politics of sleep and risk today, not simply to a growing *recognition* or *reevaluation* of sleep as vital *preparation* for the *performance* of everyday roles, routines and duties, but to a growing sense of both personal and public *duty* or *responsibility* in making sure we get 'enough' sleep, or at the very least, 'sufficient' sleep to ensure we are not 'dangerously' or 'excessively' sleepy (and hence 'a risk' to ourselves and others) in our day-to-day lives.

Sleepiness, in this way, becomes not simply a matter of individual and public concern, but a personal and moral *failure* or *failing* – a *reprobate* condition, as Kroll-Smith and Gunter (2005) appositely put it, requiring both social and individual attention and correction – which at one and the same time both *reflects* and *reinforces* the *cultural premium placed on alert wakefulness and the valorisation of vigilance in all walks of life*. We are all, in other words, *rendered increasingly accountable if not culpable for our sleep or lack of it*: a problem that is to say, cast in Foucauldian terms, of self-administration or governance, or a further postscript, borrowing from Deleuze (1995), on the pervasive nature of 'control societies' as a more fluid, flexible, fluctuating yet continuous and dynamic series of (extra-institutional) power relations regarding conduct and existence.<sup>4</sup>

While tiredness or sleepiness therefore, as noted in Chapter 1, may well be considered normal, commonplace, inevitable and hence unremarkable for many of us today, and while lack of sleep may continue to be worn as a badge of pride or a sign of moral fibre and commitment – as embodied and expressed in the Thatcher-esque 'sleep is for wimps' or 'sleep is for losers' slogan (see Table 1) – these 'truths' are now being joined if not eclipsed by another 'truth' or series of truths which render any such stance problematic, suspect

if not downright *irresponsible*. At the very least, it seems, this former (macho) sleep-denying or sleep-negating stance can *no longer be taken too far* without incurring criticism or outright moral condemnation, particularly in safety-critical occupations such as transportation and medicine, but also more generally given the aforementioned risks and dangers (and associated alerts and reminders) of poor sleep and sleepiness for both the individual and society alike.

We see this, for example, very clearly in the *moral equivalence* now increasingly drawn between *drowsiness* and *drunkenness*. Consider, for instance, as indicative of these trends, Coren's remarks back in 1996, in his popular book *Sleep Thieves*, that sleepiness is a:

danger to the general public because of the probability that a sleepy individual might cause a catastrophic accident... Perhaps someday society will act to do something about sleepiness. It may even come to pass that someday the person who drives or goes to work sleepy will be viewed as *reprehensible*, dangerous, or even criminally negligent *like the person who drives or goes to work while drunk*. If so perhaps the rest of us can all sleep a little bit more soundly (1996: 286–7, my emphasis)

These remarks indeed are prophetic, given that cases of this kind are now on the statute books and sanctioned by the law. The US state of New Jersey, for example, is the first state in the United States to decree drowsy driving 'recklessness' under a vehicular homicide charge (the so-called Maggie's Law<sup>5</sup>) – a measure based on the calculus that 24 hours of sleep deprivation is equal to a blood alcohol level of 0.1 per cent which, it just so happens, is New Jersey's legal limit for drunk driving (Kroll-Smith and Gunter 2005: 366–7). The

critical issue here nonetheless, as the very notion of *recklessness* suggests, turns on the fact that to be so charged under this new law, a driver would not simply have to be awake at least 24 hours but have *knowingly* driven while drowsy. And the merit of wisdom of such measures, it seems, is now catching on. At least eight other US states indeed, at the time of writing, are now considering similar laws with 12 bills pending that address fatigued driving in various ways. The National Sleep Foundation (NSF), meanwhile, has also now launched its own *Drowsy Driving Prevention Week* (DDPW) with an accompanying website ([www.DrowsyDriving.org](http://www.DrowsyDriving.org)) where individuals can find information about drowsy driving. This, moreover, includes a 'drowsy driving' memorial and testimonials site for those who have been affected by a drowsy driving accident or incident, thereby adding further moral weight and emotional force to the campaign through the power of the personal and the tragic.

The Selby rail disaster was also something of a critical test case in the United Kingdom. The incident in question involved a male motorist, Gary Neil, who confessed to 'often' going 36 hours without a break and who had spent the previous night on the phone chatting to a female friend of his. On this fatal occasion he apparently fell asleep at the wheel, causing his Land Rover to leave the M62 motorway onto the East Coast Main line – and to subsequently collide with a southbound GNER express train, before being deflected into the pathway of a fully laden northbound coal train – thereby resulting in ten deaths and more than 70 injuries. Neil was charged and subsequently convicted of causing death by dangerous driving given that he *knew*, or more to the point *ought* to have known, he was *at risk* of falling asleep but nevertheless continued to drive regardless. Not only, moreover, was this

case widely reported in the press, both at the time of the incident and during the subsequent trial, it also provided a further high-profile opportunity for detectives involved in the incident to roundly condemn ‘sleep-deprived driving’ while simultaneously warning that ‘all sleep-deprived drivers should be treated as “social outcasts”’ (*BBC News* 2001).

Strohl’s (2008) recent remarks are also instructive on this count. The current inability to forecast sleepiness risk and therefore to legislate solutions makes the subject problematic, he notes. There is nonetheless, Strohl continues:

a case to be made for more public education on sleep and the impact of sleep loss on driving. This would move the objective from one of punitive responses to one of prevention through recognition of risk, and prevention of sleepiness while driving would become *more like alcohol policy*, in which both an educational and legislative focus are important to make a significant impact on public health. (2008: 582, my emphasis)

At stake here then, to repeat, is not simply a moral equivalence now increasingly drawn between drowsiness and drunkenness (behind the wheel, but also more broadly or widely in society at large) as a morally reprehensible state, but the transformation of this ‘risky’ or ‘dangerous’ corporeal state into an accountable, preventable or *potentially criminal act* for which the wantonly or recklessly sleepy may be culpable and thereby prosecuted in a court of law. Making sleepiness akin to drunkenness, in other words:

transforms this – some might say – unavoidable state of consciousness into a *morally suspect somatic condition*. Moreover, like drunkenness, it is assumed that the sleepy

person is either unable or unwilling to control this corrupted somnolent state. Like drunkenness, sleepiness is framed as a *loss of self-control*; and like drunkenness, any untoward or unwanted consequences of being sleepy are *ultimately the responsibility of the sleepy person*. (Kroll-Smith and Gunter 2005: 366, my emphasis)

The message here is simple, then: namely that ‘you’ (yes, you, me and the rest of the populace), are responsible for your sleep, or at the very least for any *unwelcome, unfortunate* or *untoward* consequences stemming or resulting from your dangerous, reckless or wantonly sleepy corporeal (in)actions: a matter of self-governance, in effect, or what Crawford (1977) long ago, albeit from a more avowedly political economy perspective, termed a ‘victim blaming ideology’ which deflects attention away from the broader drivers or dynamics of these problems in late or fast capitalism.

### **Deprivatisation? Putting sleep to work...**

Other contemporary re-workings of sleep, as further variants on these questions of risk, responsibility and blame and another prime instance of more ‘sleep-positive’ agendas, seek to recast or realign corporeal needs and corporate imperatives in newly productive ways. No longer solely or simply construed in other words, if ever it was, as the ‘antithesis’ or ‘enemy’ of late/fast capitalism, sleep is now being recast, reconfigured or repositioned in altogether more positive and productive terms as the ‘ally’ or guarantor of contemporary work time, work cultures and work ethics. To the extent indeed, as already noted, that sleep is now increasingly recognised as vital and valuable *preparation for* (rather than simply the unfortunate, inevitable and inescapable



*by-product of*) everyday waking roles and working life, and to the extent that even a short spell or bout of sleep may help 'boost' or 'enhance' the performance and productivity, if not creative flair and imagination, of the workforce (see, for example, Mednick and Alaynick 2009; Stickgold 2009), particularly in those cognitively rich sectors of the economy, then important avenues and opportunities are opened up here for the colonisation and capitalisation of sleep in the service of corporate goals and ideals.

While sleep and corporate culture then, at first glance, may make odd bedfellows, they are now it seems becoming increasingly acquainted, aligned or reconciled in ways that suggest 'profitable' relays and 'productive' fusions through the corporate colonisation or control of sleep *both inside and outside the workplace*, couched in the language or rhetoric of productivity, performance and (self-) improvement (Hancock et al. 2009). These trends, to be sure, cannot be pushed too far. Sleep indeed, as Brown (2004) rightly notes, remains a somewhat muted or marginal theme in many workplaces to date. It has nonetheless, she rightly notes, entered the corporate realm through the increasing emphasis on managing or micro-managing sleep in the service of corporate goals and busy lives, and through the inclusion of expert advice about the cultivation of 'good' sleep habits in various worker-friendly or sleep-friendly policies and practices (see also Chapter 5).

A number of examples may be pointed to on this count which each, in their different ways, seek to 'capitalise' on sleep to good effect, harnessing its promise, powers and potential in ways which reflect or reinforce corporate imperatives and resonate with broader trends towards the colonisation or management of everyday life. Sleep's changing fortunes and emerging significance within business culture

and business discourse, in this respect, 'suggests just how *ubiquitous contemporary corporate training has become*; even a basic bodily need is now being deployed for the *objective of improving performance and productivity*' (Brown 2004: 178, my emphasis). Sleep, in other words, as Hoffman comments, becomes yet another '*activity – something we must accomplish*' (2009: 35, my emphasis).

It is in this context, for example, that various sleep-related consulting firms have begun to spring up, particularly in North America. The prime target or market here, it seems, as already noted, are those safety-critical companies, organisations and occupations where drowsiness poses particular risks and problems. Alertness Solutions, for instance, according to its website ([www.alertness-solutions.com/products\\_sciences/products/html](http://www.alertness-solutions.com/products_sciences/products/html), accessed 16 August 2009), caters to: 'Anyone challenged by around-the-clock operations, time-zone changes, or altered shift schedules' who will 'benefit' from the 'broad range of products and services offered'. This includes a wide range of products, programmes and services, such as: (i) 'Awake at the wheel' – designed to promote safe driving and reduce risks of driving while tired; (ii) 'Alert Traveller' – to help 'corporations reduce the hidden costs of travel and optimise business outcomes'; (iii) comprehensive 'Alertness Management Programmes' (AMP), to promote alertness and performance 'on the job'; (iv) a dedicated 'AAlert' (AMP) for corporate flight operators; (v) 'Alertness Metrics Technologies' (AMT) to monitor fatigue, alertness, safety and performance in 'real time operational settings'; and finally (vi) various other services such as scheduling guidance, scientific reviews and technical evaluations, education and training programmes related to human fatigue, specialised or tailored modules and projects, and research, legal and policy advice.

These corporate dreams or drives are also evident of course in other more popular writings, cast in a self-help vein, with business culture and business ethics firmly in mind. In books such as Maas and colleagues' (1999) *Power Sleep: The Revolutionary Program That Prepares Your Mind for Peak Performance*, for instance, the benefits of sleep in terms of enhanced *productivity* and *performance* are emphasised (see also Chapter 5, below). It is in this context, furthermore, that the changing fate or fortunes of the (workplace) nap come sharply into view as another significant index or barometer of these corporate trends and transformations. A common feature of many safety-critical occupations, workplace naps are now, it seems, being advocated far more widely, both inside and outside the workplace, as a kind of *compromise* or newly struck bargain between *corporeal* needs and *corporate* imperatives which caters to already-busy people with over-burdened lives.

The guru figures here perhaps, with their own *Napping Company* ([www.napping.com](http://www.napping.com)) and a host of associated mantras, motifs, messages and merchandise (from T-shirts to doorknob signs stating 'working nap in progress'), are William Anthony and Camille Anthony – the former a professor of psychology at Boston University, the latter a finance consultant. Consider, for example, William Anthony's book *The Art of Napping* (1997), in which we are told, among a barrage of nap-related terms and excruciating puns (from 'naptitude' to 'napnasium', 'napophobes' and 'no-nap-apology'), that it is time for 'napping to come out of the closet and take its rightful place in the living room, the workplace, and any other place' (Anthony 1997: 2); that scientists are 'discovering the awesome power of napping', and; that our 'future will be more supportive of napping' (Ibid.: 5), given

a 'myriad of napping advantages, including increased productivity' (Ibid.: 79).

*The Art of Napping at Work* (2001) co-authored with Camille Anthony, is even more revealing on this count. Workplace napping, it is stated, can both '*prevent and cure the effect of sleep deprivation*'. Workplace napping, moreover, is '*one of the few habits that's good for you (improves your mood), good for your employer (improves productivity), good for your personal relationships (makes you more attentive) and good for your country (decreases accidents)*' (2001: 16, my emphasis). Like so many other 'good ideas that directly oppose our prevailing culture', it is conceded, '*workplace napping is not an easy sell*'. But it is an idea nonetheless, we are told, '*whose time has come*' (Ibid.). Starting now then, these authors boldly proclaim or forecast:

more and more workers will be asking their bosses the simple question 'Why can't I nap, without guilt or fear, on my break time'? And the common answer will be 'You can.' Starting now, more and more bosses and supervisors will ask themselves 'Why not use workplace napping as a no-cost way to improve worker productivity and morale?' And the common answer will be, 'We will' ... The immediate workplace policy is to allow (encourage) napping during breaks. The not too distant change will be to accept napping *while* working on company time ... We can hear the napophobes reacting 'Now you've gone too far! That's ridiculous!' But have we? While napping can *increase* productivity after one awakens, we believe it can also improve productivity *while* one is napping. How else could we have written this book? (2001: 116, original emphasis)

MetroNaps are also now, according to its website, a ‘...leading provider of fatigue management solutions to public and private sector organisations’. Since its inception in 2003 and expansion across four continents, we are told, MetroNaps ‘has continued to pioneer new ways of identifying and tackling fatigue’. We are ‘ideally placed’, the website continues, to:

help you understand the levels of fatigue within your organisation and suggest appropriate steps to tackle problem areas. We have designed a range of services from our online learning, fatigue assessments, seminars and events as well as workplace interventions and solutions which can help you understand and control the crucial issue of workplace fatigue ...*Act now to help prevent fatigue and improve key metrics.* ([www.metronaps.co.uk/pages/view/profile](http://www.metronaps.co.uk/pages/view/profile) accessed 29 September 2009, my emphasis)

MetroNaps clients, as listed on their website, range from PriceWaterhouseCooper and Procter and Gamble, to Google, W Hotels and the British Lawn Tennis Association. Products, moreover, range from the latest noise cancelling headphones to the Zero chair (based on NASA technology) and the Pzizz handheld unit which not only ‘looks and feels amazing’, but ‘allows you to nap any time, any place’ and is therefore ‘recommended for frequent travellers, commercial drivers, mobile workforces and in combination with purchases of the Zero chair’. Pzizz, apparently, combines:

Neuro Linguistic Programming (NLP), enchanting music, sound effects and a binaural beat to achieve a wonderfully relaxed state in the listener, similar to that experienced during the Rapid Eye Movement (REM) stage of

sleep. It's portable and pocket size and weighs less than most mobile phones. Pzizz comes complete with a built in alarm clock and in-ear headphones. ([www.metronaps.co.uk/pages/view/pzizz](http://www.metronaps.co.uk/pages/view/pzizz) accessed 29 September 2009)

The potential reach of these products, however, extends far and wide. If mental rather than manual skills indeed are the most highly prized today in this 'information rich' if not 'hypercognitive' age of ours,<sup>6</sup> then it is unsurprising or understandable perhaps that expressions of interest in the merits or promise of napping are also now evident in that bastion or intellectual powerhouse of cognitive capital, the university sector. My own university (the University of Warwick, UK), for example, has recently flirted with this idea of a nap-friendly environment through the trial installation of MetroNaps' EnergyPods (a sort of pod-like reclining chair with sleep or napping in mind)<sup>7</sup> in three locations on campus. 'We are the first UK University,' the website stated when first launched, 'to introduce Energy Management and EnergyPods to campus and will be investigating their use over a trial 10-week period to determine their effectiveness as a relaxation, *learning enhancement* and stress-relief tool' ([www2.warwick.ac.uk/services/tutors/counselling/sleep/](http://www2.warwick.ac.uk/services/tutors/counselling/sleep/), accessed 30 September 2009). EnergyPods, it is claimed:

allow for effective sleep in the day to offset fatigue brought on by conditions that are often found in the University environment, such as poor sleep hygiene, high intellectual workloads, a 24-hour, sometimes chaotic and stressful lifestyle that can lack calm routine. ([www2.warwick.ac.uk/services/tutors/counselling/sleep/](http://www2.warwick.ac.uk/services/tutors/counselling/sleep/), accessed 30 September 2009)<sup>8</sup>

Whether or not of course the workplace nap is quite the positive step forward its advocates, converts or champions claim, remains a largely open question at present. One thing is clear nonetheless, as Baxter and Kroll-Smith comment, namely that the workplace nap, recalling themes discussed in the previous chapter, highlights an: ‘...increasingly ravenous work culture that encroaches on modern boundaries between work and home; a culture capable of transforming private non-productive acts like workplace naps into regulated time-space behaviours’ (2005: 52). These trends, moreover, the authors continue, are not simply *variable in relation to economic sector and the mental-manual division of labour* (i.e. more common in those creative or cognitively rich activities and occupations), but *globally* depending on factors such as stage of economic development and the socio-cultural and political context of change (Baxter and Kroll-Smith 2005). Thus, while workplace napping may become increasingly popular in places such as the United States, Northern Europe and Japan, in other countries, such as Spain, Italy, Greece, Mexico, China and Taiwan, it may be in decline given economic pressures. Indeed, the ‘more Fordist the production process’, Baxter and Kroll-Smith (2005: 21) venture, the ‘less likely’ the traditional nap, siesta or *Xiuixi* ‘will survive’ – see also Li (2003) and Steger (2003a).

The changing fate or fortunes of the workplace nap then, as this suggests, cast further valuable light on the corporate colonisation or management of everyday life in general and the *deprivatisation* of sleep in particular,<sup>9</sup> in an era where alertness, vigilance, mental acuity and cerebral or cognitive labour is increasingly prized (Kroll-Smith 2008).

More broadly, what we see here, as a further instance or iteration of the governance of sleep – disseminated and

dispersed, mobilised and popularised in a variety of forms and fashions, from self-help books and newspaper and magazine articles to websites and consultancy firms – is the way in which sleep is now increasingly tied to notions of (self-) improvement, optimisation, enhancement or success (Brown 2004). It is no longer simply the case, in other words, of growing moral and legal *accountability* or *culpability* in relation to soporific states of drowsiness or sleepiness that put both self and others at risk. Sleep is also now increasingly valued or valorised as the latest low-cost means, passport or route to ‘success’ in all walks of life: another huge potential *reservoir*, *resource* or *opportunity* to tap into, in effect, in advanced neo-liberal enterprise culture as the latest if not the ultimate performance enhancer (cf. Stickgold 2009) in an era of cerebral labour and the cult or quest for self-improvement in all walks of life. In an age or era, moreover, where there is now reputedly an ‘app’ for almost everything, it is perhaps unsurprising or unremarkable that you can now monitor if not micro-manage or ‘optimise’ your sleep, courtesy of apps such as ‘Sleep Analyzer’, ‘Sleep Hygiene’ or even a ‘Snore Monitor Sleep Lab’: a case in short where the question ‘How do I sleep?’ takes on an altogether new technosocial dimension far away from the sleep laboratory in the interstices of everyday/night life.

### **The well-slept society? Policy, politics and citizenship**

Here we arrive at a further, more explicit set of political questions concerning the problems, policies and prospects of a ‘well-slept’ society. What evidence is there, for example, beyond the fragments discussed above, that sleep is now being taken up and addressed in more formal or orthodox



political and policy-making arenas, and what does this tell us about relations between sleep, citizenship and the public 'good'? Is the notion of a 'well-slept' society, for example, however envisaged or sold, a utopian dream or a realistic ideal, particularly in the so-called 24/7 era?

It is certainly possible, in the light of the foregoing discussion, to suggest that discourses and debates about sleep are implicated or closely bound up with contemporary notions of citizenship given the *rights* and *responsibilities* they involve or entail on the part of us all in risk society.<sup>10</sup> The 'well-slept citizen' in this respect, if indeed we may meaningfully speak in these terms, is one who in principle if not in practice, actively, attentively and wisely manages their sleep in the light of these rights, risks and responsibilities. Sleep, in other words, becomes a duty or obligation of the 'good' citizen in the service of both self and society; another vital matter to remain alive and alert to, in effect, and hence vigilant about in the interests of responsible (self-) governance and the public 'good'. This, moreover, as we have also seen, takes place in a climate or culture where moral if not legal sanctions are now increasingly evident for those failings or derelictions of duty on our part to live up to such *dormative-normative* standards and somatic ideals. We may not, indeed, be morally or legally responsible for our actions while asleep (see Chapter 4), but we are now, it seems, rendered increasingly accountable if not culpable for those soporific corporeal states of sleepiness or drowsiness that befall or beset us, and their untoward effects.<sup>11</sup> Sleep, in short, may well be a 'right', or measure, of a 'just' society (of which more in Chapter 3), but it is also a *responsibility* to be exercised *wisely* or *prudently* in the interests of both the individual and society or the public 'good'.

As for more explicitly articulated or formulated policies, discourses and debates on the ‘well-slept society’, a number of recent public examples may now be pointed to. The Demos *Sleep in the 24/7 Society* (Leadbeater 2004) report mentioned in Chapter 1, for example, sets out a blueprint to address the so-called national ‘sleep deficit’ in a sustained and systematic fashion as a matter of public policy. On the face of it, it is noted, the case for ‘the government becoming involved in how we sleep seems a ridiculous extension of the nanny state’ (Ibid.: 3). Sleep, on this reading, is surely a ‘private matter’ of individual choice involving consenting and responsible adults, not a concern of the state or legislature. To the extent, however, that the very ‘choices’ we make about sleep are socially shaped or structured (see Chapter 3), and to the extent that the costs and consequences of any such ‘sleep deficit’ are also social, then some form of *sustained or systematic public policy on sleep*, Leadbeater argues, is clearly called for, if not long overdue. Public policies to *support* sleep indeed, we are told, would pay ‘social and economic dividends’ (Ibid.: 33). There are strong precedents moreover, it is noted, for government interventions to limit working hours and promote sleep for some safety-critical occupations. Finally, as market-based solutions – such as sleep and wakefulness-promoting drugs and devices (see Chapter 5) – to address the sleep deficit multiply, it will, it is claimed, become ‘increasingly difficult for the government to stand on the sidelines, and it will be called in as a regulator’ (2004: 33).

What then, the Demos report asks, might be ‘the ingredients of a public policy on sleep’? The answer, it seems, involves a comprehensive package of measures, including: (i) further *regulation* of (the non-medical uses/abuses of) sleep and wakefulness *drugs and devices*; (ii) the provision

of *sleep education in schools*; (iii) greater *employer responsibilities* to promote *sleep-friendly policies* and principles at work such as workplace naps and other flexible sleep management training programmes or packages, particularly for employees working long hours or irregular hours such as shift workers; (iv) the promotion of *public napping facilities*, including shut-eye pods at airports, libraries, railway stations, cafes and parks; and (v) the *regulation of working hours* (Leadbeater 2004: 30–40). Politicians, the report concludes, should also ‘do their bit’, even though they are terrible role models:

The norm, at least since Mrs Thatcher, is for government ministers to work most evenings, returning to their homes after dinner to deal with their papers till the early hours. One can only wonder at the role that sleep deprivation plays in some of the decisions politicians take. It will be difficult to redress the wider sleep deficit if politicians, managers and other public figures don’t *show some responsibility by demonstrating that getting a decent night’s sleep is an indication of good sense rather than weakness*. (Ibid.: 39, my emphasis)

Even here, however, in the corridors of power, the picture is somewhat more complicated or complex than this implies or suggests. The history of modern political life indeed, as we know, includes both US presidents such as Reagan and Bush Jr, and British prime ministers such as Churchill, who valued or guarded their sleep time, or even conducted some of their political affairs from the comfort or confines of their beds. Many politicians, moreover, Thatcher included, are not (or were not) averse to napping or dozing when time allows or they can get away with it – see also Steger (2003b), in a comparative vein, on napping in Japanese parliament.

If certain politicians then are poor if not terrible role models, others perhaps may point the way to a more 'intelligently governed' country (Leadbeater 2004).

The explicit reference in the Demos report to the regulation of working hours also returns us once again to the implicit and explicit ways in which sleep and fatigue now figure or feature in political and policy-related discourses and debates on work time, work culture and work ethics. This includes ongoing wrangles regarding the European Working Time Directive (EWTD), and the regulation of working hours in safety-critical occupations in which problems of sleep and fatigue management loom large. We see this very clearly, for example, in the recent controversy over the implementation of the European Working Time Directive regarding junior doctors' working hours. The UK medical profession it seems is divided over the merits of a 48-hour working week on a number of counts, with some claiming it will have disastrous consequences for both patients and doctors, and others claiming it will benefit doctors and patients alike through reduced fatigue and hence reduced risk of errors (House 2009). While the British Medical Association's Junior Doctors Committee, in this respect, has supported the introduction of the EWTD to improve work/life balance and reduce excessive hours, other bodies, such as England's Royal College of Physicians (RCP), Royal College of Surgeons (RCS) and Royal College of Anaesthetists (RCA) have warned that the 48-hour week will stretch staffing levels to breaking point, disrupt continuity of care and substantially reduce the clinical exposure or training doctors receive (Ibid.: 2011).<sup>12</sup>

Another storm, at the time of writing, is brewing within the aviation industry. Pilots from 36 countries, according to the British Air Line Pilot's Association (BALPA) website,

are now protesting that the European Parliament and European Commission are 'putting at risk airline passenger lives' through new standardised flight-time rules that are potentially 'unsafe' and likely to result in more pilot fatigue (BALPA 2009). 'Fatigue is a factor now in 10–15 per cent of all air accidents, and pressure on pilots is growing,' the General Secretary of BALPA, Jim McAuslan, states. The United Kingdom therefore, McAuslan concludes, 'has a choice. Bring the rest of Europe up to its standards or join a drive to the bottom. This is a defining moment in how passengers will be protected' (Ibid.).

It is to other advocacy or pressure groups such as the American National Sleep Foundation (NSF), however, that we must turn for the clearest and most sustained examples of political lobbying to date with the well-slept society in mind ([www.nationalsleepfoundation.org](http://www.nationalsleepfoundation.org)). Established in 1990 with the motto 'Alerting the public, health care providers and policymakers to the life-and-death importance of adequate sleep', the goals of the NSF, according to its website, are to ensure that:

1. Americans are aware that sleep is an important component of their health and safety, and that they make obtaining sufficient sleep a priority;
2. Americans recognise the signs and symptoms of sleep disorders and seek effective treatment for them;
3. public and private institutions operate in a manner consistent with providing optimal sleep for human performance;
4. the incidence of drowsy driving is reduced so that it is rare and an exception;
5. new sleep-related discoveries are made that optimise public health and the detection and treatment of sleep disorders.

National Sleep Foundation programmes and activities, in this respect, include a 'National Sleep Awareness week', 'Sleep in

America Polls' (see Chapter 1) and other events such as the previously mentioned 'Drowsy Driving Prevention week'. Public health agendas, moreover, are clearly an important part or plank of these NSF agendas (of which more in Chapter 5).

The slow 'movement' too of course, as noted in Chapter 1, embraces or encompasses many implicit or explicit sleep-related themes, based on a 'shared' philosophy of *deceleration* or perhaps more correctly 'balance' in which life is lived at the right speed, pace or tempo, with a variety of pro-slow groups and spin-offs springing up around the globe – from slow food to slow cities, slow schooling, even slow sex. Inevitably, Honoré (2004) notes, the slow movement overlaps with the anti-globalisation crusade, given both are set against 'fast' or 'turbo' capitalism as bad news for both people and the planet. In common with moderate anti-globalisers, however, he stresses, slow activists are not out to destroy or dismantle capitalism but rather to give it a more 'human' if not 'humane' or 'virtuous' face by taking aim against the 'false god of speed' and fighting for the 'right to determine our tempos' or a 'better balance between work and life' (Ibid.: 16–17).

This may well be so, but therein lays the dilemma: a more 'humane' face, to be sure, but one that potentially or ultimately risks subordinating sleep to the self-same logic or ethos from which sleep problems arise or materialise in the first place (cf. Hoffman 2009). While Honoré (2004: 35–6), for example, laments the way in which 'sleep is no longer a haven from haste', he nonetheless proceeds to cite approvingly practices such as workplace naps, chill-out or meditation rooms and the like, as evidence that companies are beginning to take deceleration seriously and taking steps to help staff 'slow down' (Ibid.: 213–14). Despite acknowledging the undoubted merits of such practices in boosting energy

and productivity indeed, the manner in which this serves to further *deprivatise* sleep, rendering it amenable to ever-greater corporate 'colonisation', 'capture' or 'control', both inside and outside the workplace, is significantly underplayed or overlooked here. The irony, moreover, that practices of this kind actually *embody* and *express or underline, rather than challenge or call into question* the cult of speed (i.e. ultra-short or smart-sleep, sleep-wise strategies as solutions to fast or turbo-capitalism) is largely lost in Honoré's analysis.<sup>13</sup> Here we return once again then to other more 'critical', 'reflexive' if not 'radical' political agendas concerning sleep in which corporeal questions of resistance, refusal or renunciation, or at the very least a politics of corporeal 'limits', themselves of course contested socio-historical matters, loom large.

## Conclusion

Sleep, as this chapter clearly demonstrates, is another vital part of the governance of bodies today in the late modern age. To the extent, for example, that drowsiness or sleepiness is now being recast not simply as an 'adverse' or 'at-risk' state but a culpable corporeal condition tied to the politics of blame, and to the extent that sleep in 'good' or 'due measure' is now being repositioned and revalued as an asset or ally of neo-liberal enterprise culture, then sleep effectively becomes the duty and responsibility of each and every one of us in the service of both personal goals and the public good: part and parcel, that is to say, of contemporary forms of *active* citizenship in which we are all obliged to govern ourselves through a more or less constant process of self-management and continuous 'control'.

The underlying message here it seems, to repeat, is that you are responsible for your sleep and that sleep, like all other

aspects of our lives today, is something to be actively worked at or managed in the interests of all: a process it seems in which 'too little' and 'too much' sleep are both now equally culpable corporeal states, particularly when the costs and consequence for self and society are fully weighed in the balance. To the extent, moreover, that corporeal needs and corporate imperatives are now being increasingly reconciled or realigned through more sleep-friendly policies and practices, such as the not-so-humble workplace nap, and to the extent that sleep is now being transformed in and through such 'enlightened' or 'humanistic' practices into a 'productive' act and a 'regulated time-space behaviour' (cf. Baxter and Kroll-Smith 2005), then this further underlines the complexities of these contemporary modes of governance, which despite their seemingly pervasive nature nonetheless remain open to contestation, challenge or critique. The chapter, in this respect, may be read as a further 'postscript' of sorts to both Foucault's notions of self-governance and Deleuze's notion of continuous 'control' societies, this time albeit with sleep in mind.

The 'well-slept' society then, to conclude, may well be a distant dream. Sleep nonetheless, as this and the previous chapter attest, is clearly another vital aspect of the contemporary governance of bodies, and hence, to repeat the central message of this book, a political matter through and through.

## Notes

1. The proverb, of course, is attributable to Benjamin Franklin (1855) in his book of the same title, although Aristotle (2002) had already long since advised that 'It is well to be up before daybreak, for such habits contribute to health, wealth, and wisdom.' Franklin also of



course equated time with money and is famously quoted as saying: 'The early morning has gold in its mouth.'

2. See also Thompson (1967) for whom, albeit in a more Marxist vein, neither industrial capitalism nor the creation of the modern state would have been possible without the imposition of synchronic forms of time and work discipline.
3. There are, as writers such as Turner (1993a) rightly note, significant points of convergence here between Foucault and Weber in terms of the *rationalisation* of life.
4. Articulated and elaborated as a 'postscript', Deleuze's (1995) notion of 'control societies' was intended to signal the multiple ways in which societies were no longer 'disciplinary' in Foucault's (1979) terms, given what Deleuze took to be the breakdown of contemporary social institutions whose authority nonetheless, he insists, becomes more continuous, intrinsic and integral to all activities and practices of everyday life and existence today. Control, in other words, becomes more pervasive and far-reaching, a lifelong task or life's work in which we are all obliged to monitor, manage, modulate, improve or optimise our capacities and conduct in a continuous fashion through a finer and finer process.
5. So-called following the death of a New Jersey citizen (Maggie), killed by a driver who admitted to falling asleep after nearly 24 hours of wakefulness. Maggie's Law in this respect, following a public outcry, made injury or death by a driver who has been shown to be awake for 24 hours before a crash a felony (State of New Jersey NJS 2C: 11-5; Strohl 2008).
6. To speak of a 'hypercognitive' age in this respect (cf Post 2000) is to highlight the premium placed on cognitive skills, performance and functioning, particularly within certain sectors of the economy but also more generally within contemporary culture. The notion of an 'information rich' era also of course meshes closely with both Agger's (2004) account of 'fast' capitalism and Thrift's (2005) analysis of 'knowing' capitalism – see Chapter 1, note 1.
7. The accompanying blurb on the MetroNaps website for the EnergyPod runs as follows: 'Raise your feet to improve circulation, set the built in timer and relax to the ambient music. At the end of your rest you will be awoken by a combination of light and vibration leaving you to return to your day with renewed energy' ([www.MetroNaps.co.uk/pages/view/energypod](http://www.MetroNaps.co.uk/pages/view/energypod), accessed 30 September 2009).
8. This presumably coincides with popular notions of 'around-the-clock' student lifestyles if not the advent of the '24/7 university campus'.

9. The 'privatisation' of sleep in the past of course was itself something of a socio-historical accomplishment and has never in fact been total. See Elias (1978/1939), for example, on the civilising process and the gradual privatisation of sleep, and Gleichman (1980) for a further development of these issues along Eliasian lines. See also Ekirch (2005) on sleep in pre-industrial times, and Crook (2008) on the spatialisation of sleep in Victorian Britain (discussed further in Chapter 4). Current trends towards the *deprivatisation* of sleep in this respect may themselves represent something of a *return to the past* when sleep was a more public affair, this time albeit in newly configured or reconfigured contexts and with very different implications for the late modern individual.
10. My use of the term 'citizenship', in this context, implies significant transformations since T.H. Marshall's (1950) classic formulation in which citizenship is now increasingly tied to notions of free choice and personal responsibility. At stake here, in other words, is a new form of citizenship which has less to do with social solidarity, collective rights and welfare entitlements associated with the nation state, than with individual obligations and a new ethic or civic duty of responsibility tied to the minimal state. Citizenship, in this respect, signals new forms or modes of governmentality (cf. Foucault 1991) in which we are all obliged through the language or discourse of risk and associated socio-political notions of individual freedom, personal choice and self-fulfilment, to take care or responsibility for ourselves as *active, responsible* citizens, and to engage in constant risk management through ever finer, more continuous processes of (self-) surveillance and control (cf. Deleuze 1995 – note 4 above). For useful recent commentaries and analyses of these issues, see, for example, Turner (1997, 1993b); Higgs (1998); Rose (1996); Miller and Rose (1990). See also Rose (2007); Gibbon and Novas (2008); and Petryna (2002) on related notions such as 'biological citizenship'.
11. Having a sleep disorder, in this respect, may absolve moral responsibility. Even here, however, the onus of responsibility still falls on the individual not to drive while knowingly sleepy, and indeed to seek professional help for their sleep problems should these problems persist.
12. Up until the 1990s junior doctors in Britain routinely worked 100 hours a week, with downward pressures over the past two decades to the current EWTD specified 48-hour working week.
13. See also Chapter 1 (note 6) for other recent critiques of Honoré's position here.

# 3

## (In)equality and (In)justice: The Rights and Wrongs of Sleep

### Introduction

Sleep, as the previous two chapters suggest, may well have become increasingly problematised and politicised in recent times. It may also be a vital part of the governance of bodies and the politics of risk, responsibility and blame today. Little, however, has been said so far about the relationship between sleep and broader socio-political issues of inequality, insecurity and injustice, or the way in which sleep, recalling Mills' (1959) now classic formulation of the sociological imagination, constitutes another missing or lost link perhaps between the private realm of personal troubles and broader public issues of social structure.

At one level, of course, sleep remains quite literally the great leveller, rendering us all equally, sooner or later, unconscious bodies as we lay down to rest, thereby easing if not erasing or extinguishing the very distinctions we honour, defend or contest in our waking lives – *'Th' indifferent judge between the high and the low'*, to quote Sir Philip Sidney (1989/1598) or *'the balance and weight that equalises*

*the shepherd and the king, the simpleton and the sage*, to quote Cervantes (2003/1604–5).<sup>1</sup>

Sleep nonetheless, as we shall see in this chapter, is indeed another important yet all-too-frequently neglected or overlooked aspect of contemporary power relations, inequalities and injustices, which is socially structured and socially patterned in various ways. Key issues in this respect, approached from a variety of different angles and viewpoints in this chapter, include the contested nature of sleep rights and sleep roles across the life course, relations between sleep, autonomy and the ‘just’ society, the ‘dark’ side or face of sleep deprivation in the guise of violence and abuse, interrogation or torture, and associated questions to do with sleep, vulnerability and ‘bare life’.

To what extent then, returning to a theme largely implicit in the previous two chapters, does sleep figure or feature in contemporary discourses and debates on rights, and if so in what ways? It is to a preliminary or provisional answer to this question that we first turn as a backdrop to the themes and issues that follow.

## **Defence: sleep and human rights**

Although rarely thought of or articulated in these terms, sleep is not simply a universal bodily need, like adequate food, warmth and shelter, but also by virtue of this very fact a basic human right.

Turner’s (2006, 2003, 1993a, b) sociological theory of human rights, based on our unavoidable and inescapable bodily or corporeal *vulnerability*, provides a useful starting point here. Sleep, to be sure, may be good for us in all sorts of ways in ensuring or enhancing our capacities and capabilities, but our bodily or corporeal need for sleep

nonetheless, from this perspective, also leaves us vulnerable in many ways, including vulnerabilities associated with going to sleep and vulnerabilities associated with staying awake too long or depriving ourselves of sleep – see for example Williams (2007a) for a fuller elaboration of these corporeal matters of sleep and vulnerability and the next chapter (Chapter 4) of this book. It is therefore, we might say, by virtue of this universal bodily need to sleep and the vulnerabilities associated with it, a fact and fate we share with all animal life indeed, that sleep may be thought of and defended or championed as a basic human right.

This in turn, of course, begs further important questions about abuses or violations of various kinds which we shall turn to shortly below. For the moment, however, the key sociological point to note is that that all societies both past and present, by virtue of this basic bodily need and human right to sleep, have to allow for the sleep of their members in one way or another (Aubert and White 1959a, b). Sleep in this respect, sociologically speaking, may be regarded as both a basic human right and a socially institutionalised (i.e. socially sanctioned, socially scheduled) status or role involving a ‘periodic remission’ (Schwartz 1970) or ‘tension-release’ (Parsons 1951) from conscious waking social roles, duties and responsibilities, with associated transition roles, rules, rituals or routines to facilitate passage both into and out of the ‘sleep role’.

Sociological work, both past and present, has sought to document and detail the basic contours and characteristics of the sleep role – such as exemption from normal role obligations, freedom from noise or disturbance, adherence to normative conventions as to when, where and with whom one may sleep, suitable bedtime attire and so on.<sup>2</sup> The key sociological point for present purposes, however, as Crossley

(2004) rightly stresses, is that these rights and duties or responsibilities may well be assumed or claimed, but are nonetheless increasingly *contested* in social life. They must be *won*, in other words, or at the very least *negotiated* or *rene-gotiated* in local, contingent, interactional contexts of power and conflict, particularly in the so-called 24/7 era where any such rights may be unravelling fast (Williams 2008; Williams and Crossley 2008; Crossley 2004). It is precisely by virtue of this sociological fact indeed that the politics of sleep is no longer confined, if ever it was, simply to the bedroom, home or neighbourhood, but is now moving out or spilling over into the workplace, the boardroom and even the law courts (Crossley 2004).

Consider, for example, as an instance of legal redress, the *Case of Hatton and Others vs. The United Kingdom* (2001), in which the European Court of Human Rights debated whether or not individuals who lived near Heathrow Airport, London had a right to a sound (i.e. noise-free) night's sleep (European Court of Human Rights 2001). The court, it transpires, ruled by 15 votes to 2 that the finding of a violation of Article 13 constituted in itself sufficient justification for any damages sustained by the applicants, thereby awarding the applicants €50,000 for their costs and expenses (see also Brown 2001). This ruling, to be sure, may have as much if not more to do with night-time noise disturbance than sleep per se. It does nonetheless constitute an important test case, precedent or proof of principle.

Not many grievances of this kind, of course, reach the law courts, particularly the European Court of Human Rights. Some commentators nonetheless envisage or predict a time in the not-too-distant future in which companies will face a growing number of law suits from tired, weary or disgruntled workers, particularly shift-workers, whose well-being if

not lives have been seriously endangered through the sleep they have missed courtesy of the long or irregular hours they are required to work (Summers-Bremner 2008: 135). And why not, one may justifiably ask. Why shouldn't sustained sleep loss, debt or deprivation be taken more seriously by employers as well as employees and by society at large, with possible legal redress if need be? If individuals after all, as we saw in Chapter 2, may be prosecuted or sentenced in a court of law for wanton or reckless states of drowsiness behind the wheel, then why shouldn't (chronically) sleep-deprived employees working long or irregular hours, whose lives, as a consequence, are impaired or endangered, turn to the law courts for recompense or redress?

A number of objections, to be sure, may be raised on this count and a number of factors or interests will no doubt continue to conspire or militate against any such future scenario, but that perhaps, to repeat once more, is precisely the point; another prime instance or example of the politics of sleep, that is to say, which serves to discourage or deflect just such a possibility. That such questions or possibilities are now being raised or posed, and that cases of the kind discussed above have already reached the law courts, certainly hints at or points in the direction of a more explicitly fashioned politics of this kind in the (near) future, alongside other forms of political engagement or expression.

It is at this very point, however, that further important sociological questions arise as to how any such sleep rights, claimed or contested, play out across the life course. It is therefore to what we might call the *micro-politics of sleep rights across the life course*, drawing on recent sociological research, that we now turn in the next section of this chapter.

## **Disadvantage: the micro-politics of sleep rights across the life course**

Placing sleep within a life course perspective throws into critical relief important socio-political issues of power, status, inequality and associated issues to do with privacy, autonomy and control, from childhood through to later life (Williams et al. 2010; Arber et al. 2007a).

Despite somewhat rosy, romanticised or idealised constructions of children's bedtimes, particularly those of the world's urban middle classes (Ben-Ari 2008), children's sleep is often a source of considerable anxiety, concern or consternation if not outright conflict for parents and children alike. Whether or not, of course, returning to Chapter 1, this is another prime example or expression of 'paranoid parenting' in contemporary risk culture or society (cf. Furedi 2002), class-related or otherwise, remains a largely open question to date in need of further empirical investigation. There are, to be sure, important historical precedents here that one might point to in the early twentieth century regarding children's sleep, thereby suggesting that the contemporary picture is not entirely new or novel, even if the nature and content of these concerns and anxieties has changed over time – see, for example, Stearns (2003); Stearns et al. (1996); and Chapter 4 of this book.<sup>3</sup>

Today, it seems, children's sleep is increasingly problematised in social, health and/or educational terms (Wiggs 2007). The concern here, in other words, echoing the broader problematisation of sleep as a matter of concern today, is that children are not getting 'enough' sleep, with potentially significant yet all-too-frequently overlooked negative impacts on their attainment, intelligence, behaviour and even obesity levels. This in turn is linked not simply to



growing concerns regarding children's over-burdened, over-busy or over-scheduled lives – including early high-school start times in the United States, homework and so on<sup>4</sup> – or the supposed laxity/informalisation of children's bedtimes, but to the ever-increasing technologisation of children's bedrooms as busy if not hyperconnected sites or zones of activity, courtesy of televisions, computers, mobile phones and so on, rather than places for sleep, peace or rest (Venn and Arber 2008; Van den Bulck 2004, 2003). Recent sociological work, in this respect, has documented the complexities of family dynamics and negotiations of sleep within complex and changing household structures and associated issues of autonomy and negotiability as young people make the transition into adulthood (Venn and Arber 2008). This, for example, includes issues of privacy, self-determination and control over the material space of sleep, and various incursions or infringements of these rights (Williams et al. 2007), particularly with respect to siblings, inter-generational power relations, and children's ability to construct their own 'night-worlds' as distinct from those of adults (Moran-Ellis and Venn 2007).

Parents' sleep too, of course, is significantly shaped and influenced by the sleep (or lack of it) of children and young people within the family or household, and associated gender inequalities and ideologies of 'parenting' (Venn and Arber 2008). Recent sociological research, for instance, has drawn attention to the lack of explicit negotiation between parents as to who provides care (both physical and emotional) for children at night-time, which effectively results in a further largely invisible or hidden night shift for women (Venn et al. 2008; Hochschild 1997, 1990).<sup>5</sup> Worries about late-night stop-out teenagers' whereabouts and safety also provide important sources of parental sleep disturbance,

together with other potential disruptions such as late-night telephone calls, late-night noise inside or outside the home, doors slamming and so on (Venn and Arber 2008). These problems, moreover, may continue for increasingly prolonged or protracted periods of time in future given cultural trends for young adults to remain in the parental home for longer now due to economic pressures (Venn and Arber 2008; Venn et al. 2008).

If parenthood poses one set of problems in terms of adults' sleep, however, partnerships and the micro-politics of sleeping together pose other potential problems. Sharing a bed as a partner in a relationship, of course, is deeply bound up with notions of intimacy, trust and the culture of 'togetherness' in contemporary Western societies (Hislop 2007).<sup>6</sup> In situations of this kind involving co-presence nonetheless, co-ordination or co-operation is clearly required regarding sleep roles, routines and rituals, which may result in common or complementary patterns in which each party respects the needs or preferences of the other (Crossley 2004). Conflicts, however, may also arise here, or at the very least struggles to accommodate one another's particular needs or preferences, thereby underlining the complex, contingent and ongoing nature of any such co-operation or complementarity (Ibid.). This, for example, may include explicit or implicit negotiation, if not outright struggles or conflict, over aspects of the sleep environment, from the amount of light in the room or when to turn the lights out, to 'appropriate' bedding and bedtimes. The double bed, moreover, may itself become a potential site or source of disturbance, if not a battle zone, courtesy of snoring bed partners, the hogging of bedcovers or the colonisation of too much bed space, nocturnal visits to the toilet, having the television or radio on, and so on (Hislop 2007). These

problems in turn are compounded when strategies developed to cope with, say, a snoring bed partner – through prodding, poking or relocating to another room, for example – actually prolong one's own sleep disturbance (Hislop 2007; Venn 2007). While much recent sociological work in this respect has pointed to the *gendered nature of these problems*, particularly women's disadvantaged status in relation to co-sleeping practices and problems (Hislop and Arber 2003a), further work is clearly needed in order to disentangle any such 'gender' effect from the more general effect, or effects in the plural, for they are doubtless multiple, of 'sleeping together' (Crossley 2004).

Paid employment of course, as already noted in Chapter 1, is another prime factor here in the social patterning or structuring of sleep across the life course, not simply in relation to the extensively documented effects of shift work (see, for example, Åkerstedt 2004, 1995), but with respect to all other forms of paid work and their relations to factors such as class and gender. Recent empirical research using the UK Time Use Survey data (ONS 2003), for example, found an inverse relationship between length of working hours and short sleep duration (less than or equal to 6.5 hours), which was stronger for men than women (Chatzitheochari and Arber 2009). Social class was also found to be a significant predictor of short sleep for men in this research, with those at either end of the social spectrum more likely to report short sleep duration. These results, moreover, as Chatzitheochari and Arber (2009) note, suggest a significant gender difference, with working men once again more likely than women to obtain under 6.5 hours of sleep on a typical weekday – see also Sekine et al. (2006).

Other recent sociological work sheds further valuable light on these issues. Paid employment, for example, was

identified as one of the main or prime causes of poor sleep, in terms of work constraints and work stresses, in Meadows' (2005) study of men and sleep (see also Meadows et al. 2008a). It also figured strongly in the link these men drew between 'sleep need' and the ability to 'function' in everyday roles (see also Henry et al. 2008). Clearly, however, as Chatzitheochari and Arber (2009) rightly note, it is important to consider here not simply paid work but *other family roles and responsibilities*, and how they impinge on sleep *quality* as well as sleep *quantity* or duration – issues which return us once again to the gendered forms of 'shift work' at home as well as the workplace (Venn et al. 2008) and associated, culturally variable, care-giving roles (see, for example, Bianchera and Arber 2008).<sup>7</sup>

Recourse to a life course approach, however, also throws into critical relief a series of other significant changes, transitions and negotiations regarding sleep throughout adulthood and into later life. This, for example, includes biological or physiological processes associated with ageing, changes in educational and employment status, and changing personal and biographical relationships over time associated with parenthood, partnerships (marriage, divorce, widowhood), friendships and other family relations, all of which may significantly influence or impact on sleep (Williams et al. 2010; Arber et al. 2007a; Hislop and Arber 2003a).

These factors in turn intersect with various 'concerns' or 'worries' across the life course which themselves, as Arber et al.'s (2009) recent study shows, appear to be both more commonly reported by women than men, and significantly gendered by type of concern and worry. 'Financial concerns', for example, were more commonly reported by men in this study, while 'family concerns' and concerns associated with caring for aged parents or relatives more commonly reported

by women. Socio-economic status too, once again, appeared to play a significant role here, with strong independent associations found between sleep problems and household income, educational qualifications, living in rented accommodation/housing and not being in paid employment – although income differences in sleep problems were no longer significant when health and other characteristics were adjusted for (Ibid.). While women, moreover, together with the widowed and divorced, reported significantly more sleep problems in this study, these gender differences were halved following adjustment for socio-economic differences, thereby suggesting that socio-economic status inequalities play a major role in accounting for gender differences in sleep problems (Ibid.).

Inequalities in sleep then, as this suggests, constitute another significant yet hitherto largely hidden, private or invisible dimension of social disadvantage across the life course. Related socio-political questions of autonomy and justice also come into view here, which are important to stress. Hale and Hale (2009a), for example, have recently posed the intriguing question of whether or not ‘justice is good for your sleep’. Drawing on a variety of empirical research which shows that those with fewer opportunities have poorer sleep habits (see, for example, Hale and Do 2007; Hale 2005),<sup>8</sup> they proceed to argue that those who have more *opportunities* available to them, and hence who have more *control* over their life projects (i.e. people who have a ‘distinct track record of self-governance and purpose’) are those who have *optimal* sleep durations and better-quality sleep overall. The ‘just society’ in this respect is a society in which ‘the autonomy of its citizens is respected; and a measure of the just society is the degree to which its citizens are sleeping well and are healthy’ (Hale and Hale 2009a: 366). Sleep

therefore, from this viewpoint, is important not because it gives rise to justice or to a better-functioning democracy or society, but because, like health, it indicates 'the degree to which a functioning democracy provides its citizens with the liberty, opportunity and resources they need to be self-governed'. Justice, in other words, is 'good for your sleep; and it is similarly good for your health' (Ibid.: 367).<sup>9</sup>

### **Discipline: sleep in institutions**

Sleep, as we know, is not simply confined to the privacy or comfort of the home. It also of course takes place in other institutional sites and settings outside the home in which issues of power, privacy, autonomy and control loom large.

Within the normal course or round of adult day-to-day life, for example, as Goffman (1961) reminds us, the individual sleeps, plays and works in different places with different co-participants, according to different rules, relations, rituals and routines. In 'total institutions', in contrast, such as the prison, the asylum, the military barracks or the boarding school, all activities occur in a similar setting, under the same single authority and rational plan, according to clearly defined rules, roles, routines and timetables to which inmates are required to conform.<sup>10</sup> Both sleeping and waking life, therefore, to a far greater degree or extent than normal everyday/night life, remain under the control and surveillance of others.

Total institutions, in this respect, may also be regarded as 'disciplinary institutions' par excellence.<sup>11</sup> Discipline, Foucault (1979) notes, proceeds from the distribution of space and the control of activities through timetables that help establish 'rhythms, impose particular occupations, regulate the cycles of repetition' (Ibid.: 154). The prison,

for instance, is an 'exhaustive' or 'omni-disciplinary apparatus', involving the *rationalisation, spatialisation and temporalisation* of bodies, that provides almost total power over every aspect of the prisoner or inmate's life, including sleep.<sup>12</sup>

On the one hand then, one might say, the appeal to sleep in these terms adds very little perhaps to what is already known about the disciplines of institutional life, both past and present. To the extent, however, that this involves the co-ordination and control or disciplining of *both* sleeping and waking life within the confines of a *single institutional space*, then it is this perhaps, more than anything else, which sets it apart from the normal course or round of everyday life and qualifies these institutions as 'total' institutions. To the extent nonetheless that sleep constitutes a 'release' of sorts for inmates – *The poor man's wealth, the prisoner's release* to recall once more Sir Philip Sidney's (1989/1598) memorable phrase – it introduces further important and indeed intriguing complexities and dimensions to the very notion of 'total institutions': issues we shall return to in Chapter 4 when we consider the various ways in which sleep exposes and exceeds the *limits of total rationalisation and control*.

The prison, the asylum, the boarding school and the military barracks then, as already noted, are the most obvious cases in point here, no doubt. Less obvious perhaps are those instances of the disciplining of sleep in various other institutional sites and settings, located in the bosom of civil society and wrapped up in the seemingly more benevolent guise of therapy or care, such as the modern-day hospital or nursing home for the elderly. Residents in the latter institutional settings, for example, all too often it

seems, have little or no control over the time they go to bed at night or are woken up in the mornings. The 'sporadic' sleep of daytime napping or dozing as a common practice and characteristic feature of nursing homes (cf. Gubrium et al. 1999; Gubrium 1975), in this respect, is joined by the 'regularised' or 'rationalised' sleep schedules associated with going to bed at night and getting up in the mornings. The institutional or institutionalised roles and routines of care home staff and the timings of their shifts, as such, clearly take *priority* or *precedence* here in determining residents' sleep timing, with or without the aid of pharmaceuticals such as sleeping tablets, especially for those who are more physically disabled and in need of more care associated with bedtimes. Residents' surveillance through routine checks, moreover, and associated changes in lighting and noise levels, often disturb residents' sleep (Williams et al. 2010).

A tension, in this regard, is clearly evident between staff concerns with 'risk' and the routine surveillance and control this engenders, and residents' own desire or wish for privacy, autonomy and control at night, including the negotiation of their own timetables of sleeping and waking (see, for example, Martin and Bartlett 2007).<sup>13</sup> To the extent furthermore that the gender mortality/morbidity paradox prevails in the developed world today, whereby women in the main live longer than men but suffer more chronic illness and disability (see Annandale (2009), for example), then women once again may be particularly vulnerable here regarding both sleep disturbance and lack of control over their own sleep in later phases of the life course through institutionalisation of this kind (Williams et al. 2010).



## Denial: sleep, torture and interrogation

Here we arrive at a further, altogether 'darker', more disturbing face of sleep disturbance or deprivation in the guise of *deliberate, wilful or intentional* attempts to withhold or deny the sleep of others, for the purposes of abuse or control, interrogation or torture.

A number of examples may be pointed to in this regard, both past and present, public and private. Findings from a recent in-depth empirical study exploring the interconnections between patterns of (not) sleeping among women and children living with or recovering from the effects of violence and abuse, for example, suggests that sleep disruption may constitute both a *strategy* and an *effect* of violence and abuse which profoundly affect the lives of women and children (Humphreys et al. 2009; Lowe et al. 2007).<sup>14</sup> Strategies of abuse found in this research, moreover, included some women's sleep being violated through being raped or assaulted while sleeping (Lowe et al. 2007). Children too were sometimes the subject of direct attack through hitting if they failed to go to bed or go to sleep when they were told (Humphreys et al. 2009). More commonly, however, women in this study described the disruption to both their own sleep and their children's sleep as being a result of fear and disturbance associated with the indirect effects of living with domestic violence. All women, in this respect, reported how they adapted, adjusted or modified their sleeping patterns in some way or other in order to minimise risk and maximise their safety in these circumstances of constant fear. This, for example, included trying to stay awake at particularly dangerous or vulnerable times, and trying to play 'catch up' with their

sleep at other times when it was safer to do so; snatching sleep, that is to say, whenever and wherever they could. The use of drugs and prescription medications to manage sleep was also commonly reported among these women, though complex and hedged with concerns (Lowe et al. 2007). At stake here then, as this suggests, was an attempt on the part of these women to fit their sleeping patterns around the working life, social habits and sleeping patterns of the abuser in a manner far removed from the normal ways (discussed above) in which couples negotiate their sleeping patterns; a situation, moreover, in which *fear became the guiding principle* and organising factor in any and all such strategies (Humphreys et al. 2009).

Sleep deprivation has also of course, continuing in this vein and elaborating further on the notion of *vulnerability* discussed earlier, been used for military, security or political purposes as an instrument of torture or interrogation which, unlike some other methods, leaves no visible marks or obvious scars on its victims. Sleep deprivation of this kind, indeed, has a long and chequered history as a tried and trusted method of ‘softening’ people up and getting them to talk, if not confess to just about anything, the irony being that the more prolonged or sustained the sleep deprivation, the more confused or disoriented, if not delusional or deranged, the subject becomes and hence the more unreliable their testimony is likely to be – though that of course may be precisely the point or purpose, rendering its victims all the more pliable or susceptible to manipulation of various sorts. Even moderate sleep deprivation, for example, is known to impair cognitive functioning, including logical reasoning and memory, verbal processing and decision-making, while prolonged sleep deprivation causes

short-term memory problems, speech impairments, reduced pain tolerance thresholds and other ailments.

Perhaps the most recent and notable 'outing' of these practices concerns the treatment of US prisoners in Iraq, Guantánamo Bay and Afghanistan (see, for example, Worthington 2007; Rose 2004). 'Sleep adjustment', according to the Pentagon, involves 'altering' the sleep cycles of detainees by reversing day and night, thereby inducing disorientation similar to jetlag. This, for instance, in the well-publicised case of Abu Ghraib, involved the authorisation by the Bush Jr Administration of sleep-adjustment techniques for up to 72 hours. The legality of these techniques has been much contested and debated, with organisations such as Amnesty International arguing that they constitute grave breaches of the Geneva Convention. The European Court of Human Rights and the Supreme Court of Israel, moreover, have both ruled sleep deprivation inhumane and unlawful, thereby further underlining the role of sleep as a basic human right, while the US Obama Administration has pledged a 'new' (post-Bush) era of respecting human rights, including the promotion of safe, lawful and humane treatment of individuals held in US custody and the closure of Guantánamo Bay – the latter albeit a pledge which has yet to materialise a year into Obama's presidency.

What we see here then, to summarise, is yet another important face or facet of the sleep deprivation debate, an altogether darker, deliberate or intentional side which itself, comparatively speaking, casts a long shadow over the other forms of sleep loss, debt or deprivation considered so far in this book and which once again, in the most extreme fashion, raise questions of sleep, vulnerability, human rights and the rule of law.

## Dwelling/deracination: sleep and bare life

A final set of issues, for the purposes of this chapter, concerns the rights and wrongs of sleep among those without bed or abode around the world today, whose precarious existence casts further critical light not simply on the embodied vulnerabilities and vicissitudes of sleep but broader political or biopolitical issues of 'bare life'.

Dormancy and domicile or dwelling, of course, are closely related in the normal course of events. Where you sleep, in other words, is in the main where you dwell or reside (cf. Schwartz 1970). For the homeless, however, these links become broken, severed or problematic, particularly for 'rough' sleepers who sleep outside. Sleep indeed, as various studies have suggested, embodies and expresses many important dimensions and dilemmas of homelessness. Duneier's (2000) ethnographic study of life on the sidewalks of Greenwich Village, for example, is revealing on this count in terms of the place of sleep or sleeping in the person's 'overall logic' – people, in this particular case, on the 'margins' of urban American society, who are targeted by politicians, business owners and the police, and who struggle to make a 'decent' living and turn their lives around. Sleeping on the sidewalks in this respect, as Duneier compellingly shows and painstakingly details, may occur for a variety of reasons, such as saving a good vending spot, saving money or drug use (Ibid.: 161–5). For some, moreover, 'sleeping in a bed no longer feels natural' (Ibid.: 168). It is *entrepreneurial* activity more than the person's 'unhoused' status, however, Duneier stresses, that appears critical here to these people's identities, thereby underlining once again the location of sidewalk sleeping within the overall logic of their lives; an 'embeddedness in

habitat', in effect, in which sleep must quite literally take its place (Ibid.: 169).

There is then, as this suggests, a certain 'appeal' to life on the streets, entrepreneurial or otherwise, which is also confirmed in Rensen's (2003) ethnographic study of sleeping rough on the streets of Amsterdam. While drugs addiction and mental illness can, in this regard, lead to conduct that perpetuates outside sleeping, the latter also expresses affinities, affiliations or ties to certain settings and the associated 'social scene', including contacts with other homeless individuals and outside sleepers (Ibid.: 105). Sleeping outside indeed, Rensen notes, is almost always 'a compromise'. Rough sleepers moreover, he stresses, remain 'ambivalent' about the meaning of sleep and rest as both important and unimportant in their lives (Ibid.: 101); a 'rare privilege' for the majority of outside sleepers, that is to say, in which bad weather, police control and lack of security regularly conspire against sound sleep or slumber, thereby resulting in a permanent state of tiredness or sleepiness which becomes, in effect, *re-normalised*. What differentiates rough sleepers from the rest of society then, as detailed ethnographic studies of this kind clearly suggest, are the *social conditions* under which they must live, which sleep itself embodies and expresses:

In society in general people have a stable sleeping place. The non-homeless can fulfil the primary need of rest *without worrying about the rain or cold or other people*: they don't have to find sleeping equipment or a sleeping place. The *certainty of a sleeping room* within a home makes it possible to *separate sleep* to a certain extent from other parts of life such as working and social life... That is the main difference between the homeless and the

non-homeless...Rough sleepers face a specific set of social conditions that makes it *difficult if not impossible to separate rest and sleep from other basic necessities*. (Ibid.: 106, my emphasis)

One may go further here perhaps and suggest that sleep, in such circumstances or situations, is another example or expression of what Agamben (1998) terms 'bare life'. A life, that is to say, of exclusion in which existence is pared to the bone, reduced to bare or naked life, and stripped of all rights by virtue of these very states of exception and exclusion.<sup>15</sup> What Agamben has in mind here, of course, as the very 'paradigm of political space' in which 'politics becomes biopolitics' (Ibid.: 181), is *the camp*, particularly the concentration camps, labour camps and death camps of the Nazi era:<sup>16</sup> a line of argument which includes, no doubt, returning to the previous section of this chapter, the 'bare life' of those contained or detained in places such as Guantánamo Bay. Compared to the spectre of 'the camp' then, sleeping rough may hardly qualify as bare life, particularly if, as both Duneier and Rensen's research seems to suggest, there is a certain 'appeal' or 'logic' to life on the streets, entrepreneurial or otherwise. To the extent nonetheless that participants in these forms of life exist on the margins of society, and to the extent that the lives they live, without bed or abode, involve more or less extreme forms of hardship and deprivation, then sleeping rough too perhaps may be regarded as another example or further expression of bare life. So too no doubt the precarious sleeping as well as waking lives of others around the globe today, such as the slum/street children of Mumbai or Ghana, the forced migrants in refugee camps in unstable militarised border zones where the corporeal boundaries between 'vulnerability' and 'protection' are

frequently confused or blurred (Vogler 2008), and the fragile, fickle or fateful sleep of those in other war-torn, poverty-stricken, disease/disaster-ridden parts of the world whose common corporeal fate is indeed 'bare life'.

## Conclusion

This chapter, as the reader will no doubt have discerned by now, has shifted focus somewhat from the previous two chapters in order to consider more fully, from a variety of different angles or viewpoints, important socio-political matters of inequality and injustice or the rights and wrongs of sleep around the world today.

From the negotiation and contestation of sleep rights and sleep roles across the life course to the darker face of sleep deprivation in the service of abuse, torture of interrogation, and the bare life of those without either bed or abode in both the developed and the developing world today, the rights and wrongs of sleep, it is clear, constitute another important axis or dimension of the contemporary politics of sleep, albeit a largely hidden, neglected or invisible one.

At once both a basic human right and a sensitive if not profound corporeal expression of power, vulnerability, (in)security, (in)equality and (in)justice, sleep we may safely conclude is something that both *unites* and *divides* us: another vital missing link, recalling Mills (1959) once more, between the private realm of personal troubles and the public realm of social structures.

## Notes

1. Others of course cast these levelling powers of sleep in more derogatory terms. Nabokov (2000), for example, refers to sleep in this

- egalitarian vein as the 'most moronic fraternity' in which we are all reduced to a state of non-sentience (Nabokov, quoted in Hoffman 2009: 29). See also the fictional character Dr Gregory Duden, in Coe's (1997) novel *The House of Sleep*, discussed in Chapter 5 of this book, who likens sleep to a disease in need of a cure.
2. See, for example, Schwartz (1970) for an early sociological formulation of the sleep role drawing on Parsons (1951) among others, and Aubert and White (1959a, b) for another even earlier sociological interpretation or formulation of sleep. See also Williams and Bendelow (1998), Williams (2008, 2005), Williams and Crossley (2008) and Crossley (2004) for other more recent sociological discussions of these matters.
  3. Concerns regarding adult sleep, Stearns suggests, were clearly evident towards the end of the nineteenth century in the context of discourses and debates on stress disorders such as 'neurasthenia' and the general tensions, stresses and strains of modern (urban) life, including the increasing use of electric light and the popularisation of caffeine drinks. It was not until the 1920s, however, that these concerns were significantly picked up in child-rearing manuals and popular parenting magazines, as part and parcel of escalating standards and expert pronouncements on sleep, including strict behaviourist edicts and more permissive advice in the mid-twentieth century by the likes of Dr Benjamin Spock (Stearns 2003; Stearns et al., 1996). See also [www.faqs.org/childhood/re-soc/sleep.html](http://www.faqs.org/childhood/re-soc/sleep.html) (accessed 30 January 2010).
  4. Some school districts in the United States indeed, such as Edina, Minnesota, have delayed high-school start times in the morning to allow children more sleep time: a shift, in the case of Edina, from 7.25 to 8.30 AM, which on various measures appeared to boost children's educational performance, motivation and well-being, particularly among the brightest students (see, for example, Martin 2002; Epstein et al. 1998).
  5. Venn et al. (2008) in this respect go beyond Hochschild's (1997, 1990) previous sociological notion or formulation of the 'second shift' to delineate in effect a first shift, a second shift, a third shift and a fourth shift: the first shift being daytime work; the second shift undertaken in the evening; the third shift being the emotional activity throughout the first and second shift involved in thinking about the needs of children, partners and/or employment; and the fourth shift being both the emotional activity at night related to children, partners and other family members, and getting up in the night to deal with children's needs or domestic chores (Venn et al. 2008).



6. This adult practice, however, contrasts with the professional discouragement of parent/children co-sleeping in countries such as North America and the UK today. From a global perspective, nonetheless, co-sleeping with children remains a relatively common or culturally accepted/expected practice. Even in the former contexts, moreover, parents may feel strongly that sleeping with their infants or children is 'natural' or the 'right' thing to do, thereby causing resentment in the face of professional advice or intrusions to the contrary. See, for example, Ben-Ari (2008); Tahan (2008); Ball et al. (1999); Lozoff (1995); Caudhill and Plath (1986).
7. The particular intensity of family connections in Italy, for example, and the associated close inter-generational exchanges of informal care, as Bianchera and Arber (2008) show, 'puts into sharp relief how caring delineates the extent and continuity of women's sleep, highlighting how family roles and relationships interact and intersect with sleep' (Ibid.: 131).
8. Measured in terms of sleep duration, with short and long-sleep duration categorised as 'sub-optimal' and mid-range sleep categorised as 'optimal'.
9. This, to be sure, is an intriguing and important argument, but one that rests on a series of debatable assumptions regarding sleep itself, not least the notion that 'one cannot value sleep for its own sake' and that 'one engages in sleep for the purpose of other projects' (Hale and Hale 2009a: 361–4; see also Hale and Hale 2009b). If those, moreover, who have more opportunities available to them and more control over their life projects are those who have better or more optimal sleep, and if sleep in this regard tracks autonomy or self-governance, then how, we might ask, does this square with the previously cited UK evidence by Chatzitheochari and Arber (2009), that those at *both ends* of the social scale or spectrum were more likely to report 'short' sleep, and other more general comparative data on widespread perceptions of time shortages or the absence of genuinely 'discretionary' or 'free time' (cf. Goodin et al. 2008; Hochschild 1997, 1990)? One possibility here perhaps, if this data is correct, might be through *differential forms of stress* linked to social status and associated economies of time. At the very least, however, this suggests a more complex picture or model than Hale and Hale propose at present.
10. Goffman defines the 'total institution' thus:

a breakdown of the barriers ordinarily separating these three spheres of activity [sleep, play and work]. First, all aspects of life

are conducted in the same place under the same single authority. Second, each phase of the members' activity is carried out in the immediate company of a large batch of others, all of whom are treated alike and required to do the same thing together. Third, all phases of the day's activity are tightly scheduled, with one activity leading at a prearranged time into the next, the whole sequence of activities being *imposed from above by a system of explicit formal rulings and a body of officials*. Finally, the various enforced activities are *brought together into a single rational plan purportedly designed to fulfil the official aims of the institution*. (1961: 17)

11. This therefore suggests further potential points of convergence, not simply (as noted in Chapter 2) between Foucault and Weber, but Goffman too in terms of both the disciplines of the total institution and the rational domination and disenchantment of life for its inmates: an iron cage indeed.
12. See Archer (2002), Fitzgerald and Sim (1979), Cohen and Taylor (1972) and Serge (1970), for example, for other more contemporary accounts of late twentieth and early twenty-first-century prison life.
13. On the darker side of nursing homes, in the guise of bedroom abuse, see for example Lee-Treweek (2001).
14. For other studies either directly or indirectly addressing these issues, see for example: Humphreys and Lee (2006, 2005); Taft et al. (2004); Brokaw et al. (2002); Lemmey et al. (2001); Martin and Mohr (2002); Hathaway et al. (2000); Humphreys et al. (1999).
15. The Foucauldian thesis on biopower and biopolitics indeed, Agamben claims, stands in need of 'correction' or 'completion' on this count in the sense that:

what characterizes modern politics is not so much the inclusion of *zoē* in the *polis* – which is, in itself, absolutely ancient – nor simply the fact that life as such becomes a principal object of the projections and calculations of State power. Instead the decisive factor is that, together with the process by which the exception everywhere becomes the rule, the realm of bare life – which is originally situated at the margins of the political order – gradually begins to coincide with the political realm, and exclusion and inclusion, outside and inside, *bios* and *zoē*, right and fact, enter into a zone of irreducible indistinction. At once excluding bare life from and capturing it within the political order, the state of exception actually constituted, in its very separateness, the

hidden foundation on which the entire political system rested.  
(1998: 9)

See also Rabinow and Rose (2006) for a recent critique of Agamben's conception of biopower.

16. See, for example, Levi's (1987/1958) powerful and poignant personal account of life in the Auschwitz concentration camp.

# 4

## Transgression and Taboo: The 'Sleep of Reason' and the Politics of Release?

### Introduction

In this chapter I approach the politics of sleep in a somewhat different corporeal light, one in which corporeal matters of unconsciousness, if not unruliness, transgression and taboo, the dormative and the normative, loom large. Sleep, after all, as the foregoing chapters attest, may very well be disciplined or governed in various ways, but this still leaves largely open and unexplored the degree to which sleep in the final instance, qua corporeal state of unconsciousness, is amenable to discipline and governance in this way, or to put it slightly differently, the degree to which sleep as a loss of waking consciousness ultimately befuddles, confounds, defies, exceeds or in some other way resists any such attempts at discipline or governance. Sleep, that is to say, as a more or less radical albeit reversible form of severance, withdrawal or release, if not refusal or resistance, to the conscious waking rational world and the normative demands and dictates of society both 'outside' and 'within' ourselves.

Discipline and governance, to be sure, operate at multiple levels, both consciously and unconsciously, rationally and

affectively. Sleep nonetheless, elaborating on themes largely implicit in previous chapters, constitutes a potentially powerful reminder of our corporeal 'limits', themselves of course contested matters, in relation to the rapidly escalating if not 'excessive' demands and dictates of contemporary social life and living, or to put it the other way around, a potentially potent corporeal reminder of the 'limits' of the conscious waking rational world which sleep, qua corporeal state of unconsciousness if not unruliness, always already exits beyond and hence exposes and 'exceeds'. The 'sleep of reason' indeed, to recall a memorable phrase, albeit one in which the wisdom as much as the will of the body should be remembered if not respected as a site or source of corporeal protest.

The chapter in this respect is best regarded perhaps as a further critical exploration if not a rival or radical reading of sleep that immerses itself more fully in these unconscious if not unruly corporeal matters. Sleep from this viewpoint, I shall argue, both challenges and confirms, underlines and unsettles our conscious waking projects and the dreams, desires and delusions of rational modernity: an 'absent presence' or 'intimate other', in effect, and a powerful corporeal reminder of the complexities and contradictions if not the 'limits' of contemporary forms of governance.

### **Disappearance: the abyss of oblivion or not-being?**

In my own bed, my sleep was so heavy as completely to relax my consciousness...and when I awoke in the middle of the night...I had only the most rudimentary sense of existence...I was more destitute than a cave dweller, but then the memory...would come like a rope let down

from heaven to draw me out of the *abyss of not-being*, from which I could never have escaped myself. (Proust 2002: 4, my emphasis)

Our starting point here, captured and conveyed so eloquently in the above Proust quote, concerns the absence, blank or void which sleep constitutes in all our lives. Sleep, *phenomenologically* speaking, involves a loss of waking consciousness and a (partial) withdrawal from the world: a 'recessive' mode of embodiment in Leder's (1990) terms, not simply from the world but from ourselves qua conscious waking agents. Your 'night-time journey', as Smith puts it, 'is one in which you *lose yourself for a while*, before meeting up again in the morning. Being human involves an interlude, which we call sleep, between being yourself and being yourself again' (2009: 176, my emphasis). To the extent then that sleep involves a loss of this kind, and to the extent that this by definition involves the absence of even a rudimentary sense of myself qua conscious waking 'self' or 'I', then it is tempting to reformulate Descartes' famous dictum (*cogito ergo sum* or 'I think therefore I am') thus: 'I sleep therefore I am not'. Sleep, however, like other states of unconsciousness, helps furnish by way of contrast our very sense of what precisely it is to have reflective self-consciousness or be a conscious waking agent, just as these self-same states of consciousness help furnish of our sense of what precisely sleep, qua loss of waking consciousness, involves or entails (Williams 2007a).<sup>1</sup>

While sleep nonetheless may appear to constitute an important corporeal 'release', if not *the* most important or radical form of severance or 'periodic remission' there is from the conscious demands and normative dictates of the waking world (cf. Schwartz 1970), including both the social

world 'outside us' and the society 'within us' (cf. Cooley 1902), this withdrawal is clearly only ever *partial*. The sleeper, after all, as Merleau-Ponty (1962) rightly reminds us, is still 'in' the world, still attached to it, albeit in a partial state of withdrawal. The sleeper, in other words, is:

never completely isolated within himself (sic), never totally a sleeper...never totally cut off from the intersubjective world...Sleep and waking, illness and health are not modalities of consciousness or will, but presuppose an 'existential step'. (Merleau-Ponty 1962: 162)

Events moreover, such as the calling of our name or a (loud) noise, may wake us up, qua sleepers, thereby drawing us back into the waking world and underlining sleep's partial, liminal, reversible status.

If we accept that this liminal state is an embodied state, and that *sleep is a bodily transition*, then this in turn serves to illustrate the wider, more general point that our being-in-the-world is irreducibly embodied in a twofold sense: a body, that is to say, that both 'gives us' a world but which also has the *power to call, recall or pull us back from that world*, through a temporary loss of waking consciousness (Williams and Crossley 2008). This *involuntary* aspect of sleep, the fact that sooner or later we all have to sleep, may 'doze' or 'drop off' without realising it, and may *fight* against or *struggle* with various corporeal states of sleepiness, tiredness or insomnia, also therefore highlights the impersonal, organic backdrop to (inter) subjective life (Ibid.). What we see here indeed, as with illness, is that 'normal' waking consciousness emerges out of and hence is dependent upon an organic foundation that is, in effect, *beyond* and *beneath* its own control (Ibid.: 3). Sleep, furthermore, is not something we can, with any degree of

precision or predictability, invoke or call up at will. Rather, it is something which *comes of its own accord*, or washes over us, in its own time, albeit in ways we might encourage or help facilitate. As Merleau-Ponty eloquently puts it:

I lie down in bed, on my left side, with my knees drawn up: I close my eyes and breath slowly, putting my plans out of my mind. But the power of my will or consciousness stops there. As the faithful, in the Dionysian mysteries, invoke the god by miming scenes from his life, I call upon the visitation of sleep by imitating the breathing and posture of the sleeper. The god is actually there when the faithful can no longer distinguish themselves from the part they are playing, when their body and their consciousness cease to bring in, as an obstacle, their particular opacity, and when they are totally fused in the myth. There is *a moment when sleep 'comes'*, settling on this imitation of itself which I have been offering to it, and *I succeed in becoming what I was trying to be*. (1962: 163–4, my emphasis)

Sleep then, to summarise, as this provisional phenomenological sketch suggests, provides a powerful corporeal reminder of the involuntary, impersonal if not primordial organic backdrop to (inter) subjective life; a recessive mode of embodiment and a *partial/periodic* form of severance or withdrawal which both affirms and problematises our commitments to the conscious waking world.

### **Dreams: spiritual and secular struggles**

The imagination of the waking consciousness is a civilised republic, kept in order by the voice of the Magistrate; the



imagination of the dreaming consciousness is the same republic, delivered up to anarchy (Diderot, the *Encyclopédia* (1965/1751–72), quoted in Solms 2007: 140).

Further important questions arise at this point, concerning both dreams or dreaming and other *in-between* corporeal or dream-like states of consciousness which, once again, seek to problematise if not de-centre or de-throne conscious waking life and bring other states of altered consciousness to the fore.

There are indeed, phenomenologically speaking, a variety of liminal or intermediate corporeal states between (deep) sleep and (alert) waking consciousness that we may point to which, generally without awareness and sometimes *against our explicit will or intentions* (catching us ‘unawares’ or off-guard, so to speak), we can drift off or lapse into. From this it follows that that our *being-there* in any given situation, by virtue of our embodied subjectivity, is not equivalent to our physical presence or co-presence (Williams and Crossley 2008). We may in such cases say that we are present in body but not in mind or spirit, even though, phenomenologically, our ‘not-being-there’ is clearly something of a fiction or failure to be there *fully* in body. To ‘drift off’ in this sense is to *lose one’s embodied grasp or grip on and involvement in a situation* (Ibid.).

On the one hand then, to repeat, these experiences serve to further sharpen our sense of what it is to be an alert, conscious waking agent (Williams and Crossley 2008). On the other hand, they represent once again another powerful corporeal reminder that our agency is not solely or simply a product of waking consciousness, thereby *complicating our sense of what agency is or is not* and pointing to the possibility of our *inhabitation or involvement in worlds other than the waking world* (Ibid.).

Daydreaming, for example, as a kind of liminal zone between sleep and wakefulness, light and darkness, dawn and dusk, is at once both a rich source of experience and a common if not shared cultural practice which fuels if not foreshadows everyday imaginations, and, perhaps most importantly for our purpose, provides a *potential foil if not point of resistance to systems of routinisation, rationalisation, coercion or control* (Löfgren and Ehn 2007). Daydreams, we might say, permit a form of '*mind wandering* that enables people to travel swiftly from one place to another or from one time to another, without moving a muscle', thereby making it possible once again to live in 'parallel worlds' populated by both 'pleasurable and scary fantasies' and 'imaginary travel' (Ibid.: 18).

*Hypnagogic* states, as one *descends into* and *emerges out of* sleep, are also instructive on this count: worlds populated by hallucinatory experiences, voices, images, visions and the like which have both inspired and incapacitated the human mind throughout the centuries (Mavromatis 1987). So too lucid dreams, in which, as the name suggests, dreams *are apparent to us as dreams*, we know that we are dreaming, thereby calling into question the conventional view that statements of the kind 'I am asleep' are logically impossible (cf. Malcolm 1959). Plato, Aristotle, Augustine, Nietzsche and Freud, for example, not to mention Shakespeare, Coleridge and Dickens, all in their different ways acknowledged the possibility of the sleeper somehow being 'conscious' of the sleeping state. History, moreover, is littered with acclaimed or professed lucid dreamers, including the Marquis Leon Hervey de Saint-Denys, who in the nineteenth century anonymously wrote *Dreams and How to Guide Them* (1882/1897) – a practice or project which has now gained a more credible or respectable (neuro-) scientific face through figures such as La Berge (1985).<sup>2</sup>

In 'dreams proper', or 'full-blown' dreams, in contrast, if we may call them that, sleep provides the gateway. We need to be asleep, in other words, for dreams like this to occur, which in turn suggests 'sleep dreams' (Mavromatis 1987) as another possible term of reference. The defining hallmark in this case is that dreams of this kind, unlike lucid dreams, are *not apparent* as such, qua dreams, to the dreamer. It was this uncertainty over dreams, for instance, that Descartes was able to exploit to great rhetorical effect in the *Meditations* (1996/1641). How do I know for sure, in other words, that I am not dreaming this right now? Dreams can certainly feel as real as waking experience and often lack any irrefutable sign or signal that they are indeed dreams.<sup>3</sup> Dreams, moreover, as Descartes' dilemma suggests, have provided a rich site and source of conjecture, controversy and consternation if not crisis, throughout the course of human history, including *divine and diabolic, sacred and profane*, not to mention diagnostic or therapeutic reference points in the transition from Classical Greece to the Middle Ages, and from the early modern period through Romanticism to the present day.

One may point in this respect to a transition over time from Ancient notions of dreams as welcome or unwelcome *visitors* or external *intruders* from outside, and associated ideas of dreams 'seen', to notions of dreams as *belonging* to the dreamer and dreams as a *product* of the inner 'psychic life' of the individual; something, that is to say, we *have* or take *possession* of (Pick and Roper 2004: 6–7; Stewart 2004). The psychoanalytic interpretation of dreams as the 'royal road to the unconscious' of course, to invoke Freud's (1900) memorable phrase, is a critical point of reference here in the history of these transitions, albeit one which has subsequently come under fierce attack from a variety

of quarters, not least through the neurobiological or neuroscientific account, if not assault, on dreams – see, for example, Hobson (2002, 1995); Hobson et al. (2000); Flanagan (2000); and Chapter 5 below.

Behind these seemingly linear or straightforward transitions nonetheless, as Pick and Roper rightly remind us, lies a rich and complex history of both *continuity* and *change*, of *oscillations back and forth*, and of ‘shifting “viewpoints” within periods and sometimes within the same oeuvre’ (2004: 7). At one moment, for example:

the dream may be contrived as phenomenon intruding from outside, with good and bad thoughts located in clearly defined *dramatis personae*; at other points, even in contemporaneous works and passages of the same text, the dream may be conceived quite differently, the narrator implying that, for all the manifold figures in the dream, it truly *all* belongs to the dreamer, each ‘presence’ to be integrated with – seen as a product of the *psychic life of the subject*. (Ibid., my emphasis)

Dreams, to be sure, to the present day provide a rich source of *experience*, *insight* or *inspiration*. History, moreover, as we know, is full of examples or claims regarding the productive link between dreams and creativity, including the role of dreams in: literature, such as Robert Louis Stevenson’s *Dr Jekyll and Mr Hyde*, Samuel Taylor Coleridge’s *Kubla Khan*, Mary Shelley’s *Frankenstein*; in science, such as August Kekulé’s discovery of the benzene ring structure and Otto Loewi’s Nobel Prize-winning work on the chemical transmission of nerve impulses; and in popular music, such as Paul McCartney’s dream inspired song ‘Yesterday’.

Yet dreams have also of course, throughout human history, proved a site or source of considerable moral and political controversy, concern or consternation. A whole series of political and cultural assumptions, for example, as Hayward (2004) notes, were implicit in the *secular* interpretation of dreams during the nineteenth century in Victorian Britain, including: (i) the insistence that dreams must be located in the 'interior life' of the individual; (ii) the idea that the unconscious mind could reveal a level of association and connection beyond the conscious mind; (iii) a belief in the 'mythopoetic' ability of the unconscious, particularly the associations it forged with other 'distant memories'; and finally (iv) the inadequacy of oneirocentricism<sup>4</sup> and the need for professional assistance in the 'correct' explication of dreams (Ibid.: 161).

Today perhaps these assumptions may strike us as unremarkable. Their 'mundane' nature and status nevertheless, Hayward argues, 'obscures a whole series of *political struggles* that surrounded the Victorian interpretation of dreams' (2004: 161, my emphasis). Thus while spiritualists, Swedenborgians and superstitious Christians cherished the knowledge dreams imparted, the theory of the subconscious or subliminal mind – pioneered and developed by key members of the Society for Psychical Research (SPR) such as Sidgwick, Gurney and Myers, and facilitated in part through the use of hypnotism as an experimental method to recreate the experience of sleep while maintaining communication with the somnolent body<sup>5</sup> – militated against any such mystical politics associated with the religious or spiritual idea of dreaming (Hayward 2004: 166–8). To the extent indeed, Hayward stresses, that these religious or spiritual ideas of dreaming subverted, sabotaged or at the very least qualified prevailing notions of responsibility

and agency, reason and truth, authority and authorisation, self and state, biography and identity, they posed *significant moral and political threats* to a 'consensual society' in which individuals sought to maintain control over their actions and desires (Ibid.: 166).

From this it follows that the very idea of the subconscious or unconscious mind which emerged in the nineteenth century was itself part and parcel of a:

general strategy for *containing* the power of dreams. It was a *rhetorical mechanism* for *returning* the free floating inspiration of the spiritual vision into the *fleshbound* history of the individual. In its insistence that the discordant fragments of the supernatural must be *surrendered* to a single personal narrative, it matched a transformation that characterised the nineteenth century as whole... [in which] irrational desires, religious events and subaltern actors all disappeared from the historical stage. (2004: 170, my emphasis)

Dreams then, as this suggests, constitute another rich point of reference in the politics or governance of sub/unconscious minds/bodies, both past and present.<sup>6</sup> At stake here indeed, as we have seen, are a history of *struggles*, both secular and spiritual, moral and political, which are not perhaps so much resolved as *rearticulated*, albeit in different guises and in different contexts with different purposes in mind and different projects or visions at stake.

### **Disturbance: the perils of sleep**

Sleep, to be sure, philosophical objections notwithstanding, may be a 'pleasurable' pursuit or pastime.<sup>7</sup> It is also,

however, as already noted in Chapter 3, a fragile if not fickle state in which disturbances or disorders of various kinds, and attendant fears or anxieties, if not abject terrors, loom large. A time, that is to say, in which we are not quite 'ourselves', so to speak, or, perhaps more correctly, when we are vulnerable to the potentially capricious whims or dictates of our unconscious if not unruly (nocturnal) bodies with a will seemingly all of their own while our (daytime) selves sleep.

Nightmares, for example, returning to the problem of dreams, are a potent source of fear or terror tied, recalling Goya, to the 'sleep of reason'; a time, in other words, not simply of 'marvels' but of 'monsters'. Fuseli's (1781) *The Nightmare*, for instance, provides a powerful evocation of these themes of demonic visitations, or more specifically of incubi sitting on the chests of sleepers. It is also thought to be one of the classic depictions of sleep paralysis, a terrifying condition accompanied by vivid (hypnagogic) hallucinations and a sense of imminent danger which even to the present day, despite (neuro) scientific explanations, is embodied and expressed through folklore notions such as the 'old hag', 'being pressed', the 'ghost that forces you down' or the 'devil on your back' (see, for example, Weisgerber 2004; Mavromatis 1987).

The resonances here with gothic images of evil and excess, devils and demons, darkness and death, madness and monsters, the spiritual and the supernatural are also, of course, readily apparent (Davenport-Hines 1998). These unwelcome nocturnal 'visitations', however, may not simply terrify us when they happen but leave us terrified at the very thought or prospect of going to bed. Coleridge (1985, 1971), for example, who appears to have been more afflicted than most by the perils of sleep, described sleep

as a 'howling wilderness' that 'I dread' given the horrid or tortured visions and creatures that beset him throughout the night.<sup>8</sup>

Other perils or problems of sleep, in contrast, may leave us not so much paralysed with fear or pinned to our beds as propelled into various nocturnal or somnolent states of corporeal action or activity. We may, for example, walk as well as talk in our sleep. Activities such as eating, bathing, urinating, dressing, talking, whistling, dancing, climbing, even driving, engaging in sexual intercourse or committing murder, have also been reported or claimed during episodes of sleepwalking. In July 2005, for instance, a case was reported of a 15-year-old girl in the United Kingdom who was rescued by a fireman after she went sleepwalking and ended up on the arm of a 130-foot crane (Marsh 2005).

The sleepwalker, or somnambulist, was also of course, as Melechi (2003: 164) notes, a familiar or newsworthy figure in Victorian culture. This, for example, recalling themes touched on earlier in this chapter, included various forms of 'artificial somnambulism' into which 'hypnotised' or 'magnetised' subjects may fall, alongside their 'natural' and 'narcotic' counterparts. Somnambulism indeed, as this suggests, was an ill-defined and elastic concept at the time into which 'almost any action undertaken without apparent awareness, and with lack of subsequent recall, might fall' (Ibid.: 166). It also, however, resonated with a broader series of debates, evident at the time, on automatisms, imitation and other mimetic aspects of individual and group behaviours, all of which, in one way or another, pointed to the uncomfortable or troubling truth that *much of what we do we do unthinkingly in a fashion akin to sleepwalking*.<sup>9</sup> With the decline or demise of mesmerism nonetheless, some of the more wild or fanciful, outrageous or outlandish claims



associated with these Victorian forms of somnambulism were resolved or rescinded (Ibid.). Somnambulism instead became the province of sleep science and forensic psychiatry and continues, to the present day, to provide a defence against criminal charges such as murder or rape (Ibid. see also Cramer Bornemann 2008).

A tragic case of this kind, for instance, recently hit the news headlines, involving a British man with a history of sleepwalking and other sleep disorders,<sup>10</sup> who strangled his wife of 40 years during his sleep as he dreamt he was tackling intruders (de Bruxelles 2009; Hanlon 2009; Jefferies 2009). Both defence and prosecution had accepted from the start of the trial that Mr Thomas, a retired steel worker from Neath, South Wales and the father of two, was *not* in control of his actions at the time of the killing. The jury therefore had been asked to decide not if Mr Thomas had killed his wife but whether or not he was 'medically insane' at the time he had done so. By the end of the trial, however, the jury were directed to return a not-guilty verdict, thereby allowing Mr Thomas to leave court a free and innocent man.<sup>11</sup> 'In the eyes of the law,' Mr Justice Nigel Davis told Mr Thomas, 'you bear no responsibility for what happened' (de Bruxelles 2009).<sup>12</sup>

Sleeping bodies may be recalcitrant, resistant or unruly in other less dramatic ways too, however. People, for example, may snore in their sleep (of which more below), sometimes quite loudly, the irony being they may be the only one in the house who cannot hear themselves snoring, given that they as the snorer, by definition, are asleep at the time!<sup>13</sup> Bodies may also of course, continuing in this 'recalcitrant' or 'unruly' vein, *fall asleep too readily or easily*, as in cases of narcolepsy or *excessive sleepiness*, or *fail to fall asleep*, as in cases of insomnia. In both cases, however, returning to previous

phenomenological themes, we *struggle with a body* that is either shutting down before we want it to or not shutting down when we want it to (Williams and Crossley 2008). To the extent, moreover, echoing Chapter 1, that insomnia or sleeplessness is now viewed as a common complaint or symptom of life and living in today's media-saturated, hyperconnected or wired world, then it doubles as both a literal and metaphorical reference point in a relentless if not voracious era that truly *knows no bounds*. Both insomnia and the 24/7 active world, in other words:

belong to a *regime of desire whose key feature, over-production, hides their causes...Insomnia produces a surplus of thought, and the wired world produces a surplus of information, images and interactive opportunities, and neither our world nor the insomnia it generates seems able to assist us with managing this ongoing surplus.* (Summers-Bremner 2008: 133, my emphasis)

The history of insomnia then, from this vantage point, is perhaps best viewed as a history of 'loss' involving an undervaluing of absence or oblivion in contemporary culture on the one hand, and an associated loss of 'nocturnal aptitude' or 'literacy' on the other (Summers-Bremner 2008: 9): an incessant and incandescent age, in short, in which darkness is crowded or drowned out by the glare of artificial light and our busy around-the-clock lives and lifestyles.

### **Deviance, debauchery and disgust: the dormative and the normative redux**

It is precisely at this point that a further series of more explicit questions arises, pertinent to any consideration of

the politics of sleep and the governance of unconsciousness, concerning relations both past and present between what might be termed 'the dormative and the normative' (Williams 2007b). Sleep, as we have already seen, may very well be a basic human right and a socially recognised, scheduled and sanctioned bodily need, but the legitimacy of sleep is also of course contextually contingent or variable in relation to prevailing socio-cultural norms, forms, customs and conventions.

Sleeping at the wrong time or in the wrong place, for example, as we all know, may incur sanctions of various kinds given the codes or conventions it flouts or violates (Williams 2007b). The practice of workplace napping, for instance, as we saw in Chapter 2, may or may not be greeted with disapproval, depending on the particular workplace and associated employment policies and practices in question. The Japanese custom or practice of *Inemuri*, for instance, is particularly instructive on this count given the tolerance or latitude it accords the sleeper or quasi-sleeper in various public situations or settings (Steger 2003a, b; Steger and Brunt 2003). It is indeed quite customary and acceptable in Japanese society, it seems, to doze or drop off to sleep in public (at a lecture, meeting, party or other social event, for instance), as long as the sleeper or quasi-sleeper is ready and willing to relinquish 'sleep' at the appropriate moment when their attention is required.<sup>14</sup> Even here, however, in keeping with other societies such as China and India that exhibit a high degree of *tolerance* towards daytime as well as public sleep or napping, 'there are many occasions', Steger and Brunt remind us, 'when sleep during social activities is not allowed' (2003: 19).

It is not simply then, as this suggests, the *when* but the *where* and indeed the *with whom* of sleep that matters,

which includes the *distribution* or *spatialisation* of sleep, both past and present, individual and communal, in terms of prevailing norms, forms, bodies and beds. Crook (2008), for example, in an illuminating study of sleep in Victorian Britain, highlights how the evolution of modern sleeping space was informed not simply by ideas of privacy and civility (cf Elias 1978/1939), but also by concerns about the functioning of 'normal' bodies and minds, the governmental agency of space and the moral integrity of the nuclear family. The bed furthermore, he stresses, remained a highly problematic *indeterminate* space, facilitating 'deviant' as much as 'civilised' behaviour and giving rise to all manner of pathologies, perversities, phobias – thereby shedding further valuable light on the reciprocities of 'rule and resistance', 'pleasure and power', which at once 'constitute and imperil' the integrity of the modern body (2008: 15).

We see this, for instance, very clearly in the many social investigations from the 1830s onwards on the 'conditions of the working classes' (e.g. Chadwick 1997/1842; Mayhew 1851), which all in their different ways included a concern with the spatial distribution of dormant bodies, often through 'graphic descriptions of bodies mingling and mixing' (Crook 2008: 20). The concerns and anxieties articulated here, Crook comments, were about moral as much as physical or public health. In such circumstances indeed, 'all manner of bad habits and social ills flourished', such as alcohol, crime, laziness and violence (Ibid.), not to mention the horror or taboo of incest (see, for example, Wohl 1976). These concerns in turn were magnified and multiplied many times over in relation to the common lodging houses, dormitories or 'doss-houses', the very antithesis of respectable domesticity, in which an 'unwholesome mix'

of transgressive practices and social pathologies coalesced (Crook 2008), with grotesque echoes and carnivalesque overtones (cf. Bakhtin 1968). Bodies, in other words:

enjoyed an easiness of presence, possession and performance. No shame was attached to nakedness, nor was there any regard for physical normality. In lodging houses the lame, the blind, the deaf, the deformed were able to mix free of stigma and abuse. To enter a lodging house was to enter a grotesque world of pleasure and perversity, and whatever disgust they elicited was often accompanied by a sense of wonder. (Crook 2008: 31)

'Normal' sleep in this respect, a contested point of reference in any case, to be sure, was very much the exception to the rule in these dens of ill-repute. The Victorian bedroom nonetheless, Crook (2008: 28–9) reminds us, was also a site and source of multiple pleasures, pathologies and phobias, including (middle-class) parental concerns and anxieties over children's sleep, particularly wet-dreaming and masturbation (Hunt 1998) – see also Stearns (2003) and Stearns et al. (1996) on growing concerns and changing standards regarding children's sleep during this time period.

The history of sleeping bodies then, not least the spatialisation of sleeping bodies in all their richness, pleasures and perversities, may constitute another important yet hitherto largely neglected or overlooked aspect of the *history of corporeal transgression and taboo* (see, for example, Stallybrass and White 1986). Still today, moreover, as Crook (2008: 32) rightly stresses, the bedroom represents a space of considerable 'struggle' which *defies or resists total rationalisation* given that sleep itself resists total or ultimate rationalisation. While

the sleeper qua sleeper, moreover, may convey or display a certain child-like 'innocence', and while one cannot in any fair or just sense be held accountable for one's actions while asleep, the fact that bodies may by daytime or daylight standards behave quite 'badly' if not 'outrageously' while we are 'asleep', may still nonetheless engender certain feelings of awkwardness or embarrassment, guilt or remorse, stigma or shame in waking life, publicly acknowledged or not (see, for example, Meadows et al. 2008b).<sup>15</sup> Sleep, in other words, both confirms and complicates what by daytime standards of civilised conduct we take ourselves, or at least aspire, to be. The dormative and the normative, in short, as this suggests, are intimately related and hence another key part of the politics of sleep and the history of corporeal transgression and taboo.

### **Darkness: the politics of the night**

Here we arrive at a final set of issues to do with darkness, and associated questions concerning not so much unconscious bodies perhaps as unruly bodies and the politics of the night. In many ways, of course, night has always been our deepest, darkest fear. Night, that is to say, as a time in which our visual powers are dimmed or diminished and questions of human vulnerability, frailty and finitude loom large or are perhaps most keenly felt. These fears, moreover, are further compounded or reinforced through long-held or cherished notions of light as 'good', a 'gift' of God and/or a source of self-revelation and enlightenment, for instance, and darkness as 'bad', 'corrupt', 'sinister' or otherwise 'evil': the realm, echoing themes articulated earlier in this chapter, of demons and devils, madness and monsters, not to mention the other, true or ultimate darkness of death itself

that 'gets us all in the end, the night that no amount of light will ever illuminate' (Alvarez 1996: 270).<sup>16</sup> The drive to make night bearable or tolerable, in this respect, includes both the human quest through the ages for lighting (cf. O'Dea 1958) and the retreat into the sanctuary or salvation of sleep (Alvarez 1996: 7).

The history of night-time, as this suggests, is a rich and fascinating one, full of ambiguities and anxieties, complexities and contradictions, pleasures and perils within which sleeping and waking life are intimately bound and inextricably entwined. Ekirch (2005), for example, points to a varied and indeed vibrant night-time culture in Western society before the Industrial Revolution, with its own customs, rules, rituals, rites, scents, sights and sounds. At stake here, in other words, was a shadowy, spectral or spiritual realm at 'day's close', filled with real and imagined threats and perils, yet also one full of opportunities and possibilities for people to *escape* the bounds, burdens and banalities of everyday life, to *express* their 'inner impulses' and to realise their 'repressed desires', however 'innocent or sinister in nature' (Ibid.: xxvi). Pre-industrial night-time indeed, as Ekirch clearly shows, was a time of crime and evil spirits, magic and masked balls, ancestral lore and prayers, wool-spinning and storytelling, midnight liaisons and bundling, sleep and dreams, liberation and renewal.

As the physical conquest of 'outer darkness' proceeded through advances in artificial lighting, however, the search moved on into the illumination of 'inner' darkness inside the head (Alvarez 1996: 22), through developments such as psychoanalysis and tools and technologies to monitor and measure electrical signals in the brain (the topic of the next chapter). Night-time, moreover, as Melbin (1989, 1979) notes, has become a 'frontier' of sorts,

if not the 'final' frontier, set for colonisation and commercial exploitation in today's 'non-stop' culture characterised by artificial illumination both inside and outside homes and businesses as 'the greatest symbol of modern progress' (Ekirch 2005: 338). Night in the city, for example, now becomes the 'continuation of day by other (electrical) means'; a time of 'leisure and intimacy, family and lovers, hobbies and pastimes... excitement and celebration' (Alvarez 1996: 259–60). Like the brain, moreover, the city only *seems* to sleep:

scattered across its darkened cortex are bright points of activity, in police stations, newspaper offices, television studios and whore houses, the night-shift is in place. Firemen and ambulance crews wait for a call, disc jockeys jabber away in their sealed cubicles, bakers pound the dough for the morning bread, the food markets are in full swing, the pubs and cafés around them are packed, and the watchers and listeners whose livelihoods depend on computers and satellites are busy in their terminals: air traffic controllers, the defence establishment, the young tiger and tigresses in the financial district, who monitor figures from the Nikkei and the Hang Seng and talk into two telephones at once. (Alvarez 1996: 261)

It is possible in this respect, as Nottingham (2003: 194) perceptively comments, to discern or detect a certain change or *relaxing* of standards at night-time when one is free or *freer* perhaps to 'loosen' or 'lighten' up and reveal one's 'less serious side'. The politics of the night, in this regard, involves a struggle or contest between those authorities anxious to 'reinforce a code of respectable behaviour' and various ill-defined 'others' who are no less anxious to 'avoid the limitations and



boredom of compliance' (2003: 192). The night, in other words:

not only produces tangible problems for those in authority and renders their charges less susceptible to political appeals, but it can also remind them of a certain moral equivocation within themselves. The virtues that lie at the heart of citizenship, sobriety, calmness, openness to persuasion, an ability to forsake the immediate pleasure for longer-term gain, are not at their strongest after dark. Night time gatherings are *more disorderly, raucous and resistant to any but the most basic appeals*. (2003: 195, my emphasis)

This, for example, includes various forms of *disorderly or unruly* behaviour on the streets of many cities at night-time, particularly British cities; problems fuelled in no small part by alcohol and other recreational drugs which keep the police, ambulance crews and A&E departments busy throughout the night.<sup>17</sup> Policing the city night, however, as Nottingham (2003: 210–11) rightly notes, is now accompanied by a proliferation of private security firms and privately employed doormen or 'bouncers' who regulate entry into all city-centre pubs and clubs. Of note here too, of course, since the introduction of effective police services in the nineteenth century, is the proliferation of modern-day CCTV cameras (in which Britain again seems to excel) and which now, in true neo-Orwellian fashion, appear to be trained on almost every move we make, both day and night.

Consider, for example, as further evidence of the sorts of nocturnal 'unruliness' at stake here and the 'remedial' work required of night-time doorstaff charge with its management, an extract from Monaghan's field notes on a busy evening

in a large city pub in the run up to Christmas. Incidents recorded during the evening, for instance, included:

a male customer urinating against a bar; another urinating against a balcony, wetting customers below; a man repeatedly exposing his genitals then complaining when doorstaff insisted he leaves; customers ordering drinks, not paying for them, then physically resisting when being escorted off the premises. A drunken man grabbed my crotch for no apparent reason...Several fights between customers also occurred. A group of young women, who were forcefully ejected by security staff after fighting among themselves, also waited by the front door for some time with the intention of seeking revenge on a doorman (even though he weighed approximately twenty stone). (2002: 4004–5)

If night-time, however, involves a certain dramatic licence or liberty of this kind with respect to everyday normative standards of civilised conduct, it also returns us once again, albeit in a different guise, to questions of 'loss', at once both literal and symbolic, material and metaphoric, regarding night-time and (true) darkness (Summers-Bremner 2008; Alvarez 1996). On the one hand, for example, the gradual colonisation or conquest of night-time and darkness suggests diminished opportunities perhaps for privacy, intimacy and self-reflection, including a 'loss of touch with our dreams as the oldest path or avenue to the human psyche' (Ekirch 2005: 335–9). We are also, however, losing touch with the night sky itself though modern-day forms of light 'pollution' which themselves, in an avowedly political vein, spur various forms of protest or resistance in the guise of organisations or groups such as the International Dark Sky Association (Klinkenborg 2008).<sup>18</sup>

## Conclusions

Let me draw this chapter to a close by returning to and spelling out the abiding themes that inform it: corporeal matters, that is to say, of unconsciousness and unruliness, transgression and taboo, the dormative and the normative, if not protest, refusal or resistance.

On the one hand, of course, sleep remains a vital precursor or prerequisite for social and political 'order', without which society and the members comprising it would, quite literally, grind to a halt or cease to function. Without sleep, in short, no 'order'. Yet sleep, as this chapter also suggests, constitutes a corporeal site or source not simply of unconsciousness but unruliness, recalcitrance or resistance, transgression and taboo in relation to the prevailing 'order'. Sleep, that is to say, as a corporeal or somatic state that does not simply exist beyond but exposes or exceeds the bounds or 'limits' of the conscious rational waking world. Or, to put it another way, sleep as a potentially powerful and potent corporeal reminder if not protest regarding the 'limits' of our involvements and investments in the conscious waking rational world and its seemingly endless, if not 'excessive', demands and dictates regarding our time and attention. The 'sleep of reason' then, to be sure, but also perhaps an expression of the 'wisdom' of the body which possesses its own rhythms if not 'reasons', so to speak.

Here once again then, this time albeit through the novel corporeal lens of sleep, we are reminded that the history of human corporeality is not merely one of the *disciplining* or *rationalisation* of bodies, any more than it is one of their *emancipation* or *liberation*. Rather, as Falk (1994: 66) rightly notes, it is a 'paradoxical combination of the two' – see

also Stallybrass and White (1986); Bakhtin (1968); Bataille (1987/1962).<sup>19</sup>

One may perhaps go further here, however, and venture two other provocative albeit tentative or speculative conclusions. First, to the extent that society is a consciously held notion or construct, both individually and collectively, and to the extent that sleep involves a more or less radical (albeit reversible) severance or withdrawal from the conscious waking world, then the sleep of any one member of society let alone the sleep of all members of society at once – an improbability if not impossibility admittedly, given that ‘some must watch whilst others must sleep’ as Shakespeare so aptly puts it – harbours the power and potential to problematise if not liquidate (albeit temporarily) both the social world ‘outside’ us and the society ‘within’ us, so to speak (Schwartz 1970; Cooley 1902). Second, if varying corporeal states of sleepiness, drowsiness or partial consciousness, harking back to Chapter 1, are now common if not the ‘norm’ in the 24/7 era, and if much of what we say and do, even in so-called alert conscious waking life, occurs unthinkingly in a sort of half-conscious or semi-conscious fashion – including auto-feelings or automatisms of various kinds (cf. Wegner 2002) – then sleep (proper) may simply be the most obvious case of a far more intriguing if not disturbing or unsettling truth; namely that societies, as writers such as Thrift (2008) and Castoriadis (2003) intimate, remain only ‘half-awake’ and therefore that *en-trancement* as much as *enlightenment* is evident if not endemic to societies characterised as much by their ‘suggested’ qualities (Thrift 2008; Wegner 2002)<sup>20</sup> as the powers of conscious rational minds.<sup>21</sup>

Cast in this light then, to conclude, sleep may justifiably perhaps be regarded as something of an ‘*absent presence*’ or

'intimate other' within both 'Man' and 'Modernity', self and society; an unconscious if not unruly corporeal matter, that is to say, which simultaneously *underwrites* and *unsettles* if not *undermines* the preferred image of ourselves as conscious rational beings and the prevailing socio-political and moral order, with important implications for the discipline and governance of bodies, both past and present, public and private.

## Notes

1. For an intriguing and instructive philosophical debate on these relations, see, for example, Johnstone Jr (1973), for whom sleep provides the necessary and indispensable condition of (self-) consciousness, and Galloway (1977), who argues to the contrary that it is consciousness which makes sleep an intelligible phenomenon, not the other way around. Sleep-related interruptions of consciousness, in other words, from this latter viewpoint, 'are intelligible, if and only if, one is aware of his [*sic*] own consciousness, *prior* to such an interruption' (Ibid.: 110, my emphasis).
2. La Berge, for example, based on a growing body of collaborative scientific work (La Berge and Rheingold 1990; La Berge and Dement 1982; La Berge et al. 1981), has demonstrated that lucid dreaming occurs during unequivocal REM sleep (i.e. the most active period of phasic rather than tonic REM), and that lucid dreaming is a 'learnable skill' through techniques such as MILD (mnemonic induction of lucid dreams). See also Hearne (1990).
3. Descartes of course was not the first, nor the last, to pose this problem: Plato before him and Bertrand Russell after him, for instance, raised similar doubts about the dream-wake distinction. By the time of the sixth Meditation nonetheless, Descartes seems to have regained confidence in his ability to reliably distinguish between these two states, thereby dismissing his own previous doubts as 'laughable', in part because God would not allow him to be so deceived and in part because dreams are 'never joined with all the other actions of life by the memory, as is the case with actions that occur when one is awake' (Descartes 1996/1641, Sixth Meditation: 89).
4. Oneirocentricism pertains to the long tradition of dream interpretations stretching back to the Greeks, including Artemidorus of Daldis'

famous second-century AD text *Oneirocritica* (the fortune tellers' guide to dream interpretation) which remained hugely influential until the early modern period (Artemidorus 1990).

5. While hypnosis, and its predecessor mesmerism, had long since been used (by showmen among others) to illuminate and hence discredit apparently supernatural phenomena, the uses of hypnotism in this context, Hayward notes, served both experimental and rhetorical ends which, at once, sought to challenge both the carnivalesque and mystical theories and interpretations of dreams and associated dream or trance-like states of subconsciousness (2004: 161). See also Melechi (2003) on *Fugitive Minds*.
6. Christopher Nolan's new sci-fi thriller *Inception* is also worthy of mention here, moving forward in time, for the future world of corporate espionage it conjures up and conveys: a world in which thieves invade, manufacture and manipulate people's minds and dreams in order to steal secrets from the unconscious.
7. Sleep, for example, it may be objected, is not strictly speaking something we can never truly 'enjoy' or experience as 'pleasurable' given that we are asleep and hence unconscious at the time. At most, it might be granted, we derive pleasure from the process of *going to* sleep and *waking up* following a 'good' sleep. See, for example, Hale and Hale (2009a, b) on these matters and Chapter 3, note 9 of this book.
8. Coleridge indeed suffered from a number of ailments or illnesses, many opium-related through his use of and withdrawal from the drug. He also coined the term 'psychosomatic' to describe the complex associations between psyche and soma during sleep, yet continued to believe that dreams could be caused by the spirits. See, for example, Ford (2004) on Coleridge and 'The pains of sleep'.
9. Sleepwalking also, of course, figures or features as a theme in many dramatic works, of which Shakespeare's *Macbeth* – in which Lady Macbeth sleepwalks due to her overwhelming guilt and insanity – is perhaps the most famous example. See Furman et al. (1997), for instance, on Shakespeare and sleep disorders.
10. The defendant apparently had been prone to sleepwalking and other sleep disorders since childhood, including 'night terrors' or *pavor nocturnus* which, it is claimed, triggered this particular tragic incident given that Mr Thomas had come off his regular medication for depression and Parkinson's disease at the time (because it made him impotent).
11. The legal defence here is one of 'automatism' in which the mind is not deemed to be in control of the body. This is a very rare defence,

- with fewer than 70 cases worldwide in modern legal history. It is also further sub-divided into 'insane automatism' (which involves psychiatric referral and treatment) and 'non-insane automatism' in which the defendant is judged to be of sound mind and the act is seen as a 'one-off' incident (de Bruxelles 2009; Hanlon 2009).
12. Similar cases of acquittal on grounds of sleep have occurred before, including: (i) a father in the nineteenth century cleared of murder after claiming he dreamt he was throwing his baby to safety; (ii) a man (Mr Jules Lowe) who, in March 2005, was found not guilty of killing his 83-year-old father due to 'insanity' while he was sleepwalking; (iii) a high-profile case in 2002 in which REM guitarist Peter Buck was acquitted of attacking British Airways staff on a transatlantic flight to London due to 'non-insane automatism' brought on by a combination of alcohol and sleeping pills at the start of the flight; and (iv) another recent case in which a man (Mr Leonard Andrew Spencer) was acquitted in Australia of gross indecency and sexual intercourse without consent in relation to a 21-year-old female house guest, after he claimed he was sleepwalking (Ballon 2009; de Bruxelles 2009; Morris 2009).
  13. Downloadable 'apps' (such as 'Do I Snore?'), as previously noted in Chapter 2, are now of course available or ready-to-hand courtesy of the iPhone for those wishing to know more about their sleep in the comfort of their own homes. Even then, however, the snorer remains unaware of their snoring while asleep and can only check or audit it upon waking.
  14. These very terms of reference, of course, call to mind once again the sociological work of Goffman, particularly his notions of *main* or *side* involvements, and *dominant* and *subordinate* involvements (Goffman 1963), which Steger and Brunt (2003) use to good effect in this context. A case of *inemuri* at a lecture, a meeting or a party, for instance, may profitably be regarded in this Goffmanesque light as a '*subordinate* involvement' to the '*dominant* involvement' which in this particular case, of course, is the social event or gathering in question (Steger and Brunt 2003: 19).
  15. On the one hand, Meadows et al.'s research seems to suggest that if the sleeper is considered to be 'unconscious', in a private space and in an intimate relationship, then bodies are free to break the normative boundaries of (waking) acceptable civilised conduct without risking embarrassment. On the other hand, however, they suggest, 'breaking these boundaries does appear to have the potential for biographical or reputational impacts, and audience anger, resentment and conflict'; a potential *mediated* albeit by things such as '*prior normative*

*expectations, length and status of relationship, and gender'* (Meadows et al. 2008b: 87, original emphasis).

16. The Polish artist Miroslaw Balka's recent installation, 'How shall I move forward?', located in the vast Turbine Hall of the Tate Modern, conjures or conveys many of these complexities, fears and uncertainties as the viewer enters its deep dark cavernous form (a structure resembling a shipping container) and stares into the black void ahead. It is a journey we are left to navigate or sculpt for ourselves, yet one involving both deeply personal and collective or universal meanings, myths and associations (Tate Modern 2009).
17. At the time of writing, the police are pressing the new Tory–Liberal Democrat coalition government to turn the clock back on the 'open all hours' licensing regime introduced by New Labour, given that it does not appear to have had the desired effect of introducing a more 'relaxed' social culture, akin to Southern Europe's approach to alcohol, thereby tempering Britain's 'binge-drinking culture' and cutting alcohol-related crime on the streets (Townsend and Rogers 2010).
18. The 'Vision Statement' of International Dark Sky Association, according to their website ([www.darksky.org](http://www.darksky.org)) is to:
  - improve the night-time environment by reducing light pollution through better lighting practices;
  - raise awareness about curtailing light pollution, the beneficial effects of doing so, and its solutions;
  - educate about the values of environmentally responsible outdoor lighting while collaborating with other like-minded organizations;
  - promote responsible legislation, public policy, research, and standards in a professional and scientifically sound manner;
  - seek specific solutions that mitigate light pollution.

([www.darksky.org](http://www.darksky.org), accessed 6 December 2009)

19. Transgression, Bataille (1987/1962) notes, 'does not deny the taboo but transcends and completes it'.
20. Thrift's (2008) discussions here, of course, indebted as they are to the likes of Wegner (2002) and Castoriadis (2003), are primarily concerned with the politics of affect rather than sleep, particularly affective contagion and related issues of automatism, imitation and suggestibility. They are nonetheless highly pertinent to the politics of sleep and associated corporeal sleep-like states of (un)consciousness or semi-consciousness.



21. This, of course, is not to deny the powers of the conscious rational waking mind, however limited its 'bandwidth'. It does nonetheless suggest the intriguing possibility that the valorisation of any such powers and potentials, particularly in an era where alertness and cognitive skills are prized, can in part at least be read as a cultural response or reaction to, if not an intolerance or repression of, any such limits. To the extent, moreover, that modernity has always been an 'ambivalent' order (cf. Bauman 1991), founded on both order and chaos, the rational and the irrational, the conscious and unconscious, then this further underlines the complexities of contemporary forms of governance and the powers of persuasion or suggestibility which operate both rationally and affectively.

# 5

## Transformations and Translations: The Laboratory, the Clinic and the Future of Sleep ...

### **Introduction**

If sleep is now a 'matter of concern' in contemporary society, if sleepiness has now been transformed into a problematic or 'at-risk' corporeal state, and if we are all now advised, encouraged or cajoled to monitor, manage, modify or optimise our sleep in various ways in line with prevailing mandates or imperatives, then this of course begs important questions about the role of sleep science and sleep medicine within the foregoing storyline regarding the politics of sleep.

This final chapter therefore brings to the fore themes largely implicit in previous chapters concerning the critical roles and relations between biomedicine, bioscience and biotechnology in the contemporary politics or biopolitics of sleep today, from the laboratory to the clinic and into the wider realms or vistas of public and private life. The chapter may also be read as an attempt to revisit and revise or update my previous thinking on these matters, paying particular attention to questions located at the intersection

of medical sociology and science and technology studies (STS), concerning the 'biomedicalisation' of sleep and the further light this casts on the biopolitics of sleep today and in the near future.

How then did sleep become an 'object' of scientific or technoscientific interest and inquiry, and to what extent did this pave the way for the subsequent development if not flourishing of more avowedly clinical concerns within sleep medicine in the latter part of the twentieth century? It is to these very questions that we first turn as a critical socio-historical backdrop to the biomedical themes and biopolitical issues that follow.

### **Brain waves: tracing sleep in the laboratory**

A full account of the history of sleep research is of course beyond the scope of the present book, let alone this final chapter.<sup>1</sup> Suffice it to say, for present purposes, that at least four key issues or meta-themes stand out here in the recent history of sleep research.

First, as the loss or negation of experience which for centuries was considered to be a largely *passive* rather than *active* state, sleep it is clear has proved at best problematic and at worst resistant to scientific or biomedical investigation; a mystery whose secrets it seems would not be surrendered easily or given up lightly. Second, while sleep has always of course been a key part of human existence if not experience, and while knowledge of the relationship between sleep and health has been evident for centuries (see Dannenfeldt 1986, for example), the origins of knowledge about sleep until well into the nineteenth century came largely, as Kroker (2007) argues, from evidence grounded in *personal experience* – either one's own or those compiled by physicians and other

dream interpreters. Knowing sleep, in other words, was thus for centuries primarily a matter of “I” and “thou” and was refracted through the prism of individual experience that depicted sleep as a negative state of consciousness’ (Ibid.: 5). Attention to sleep, in the main, occurred in the face of disruptions of various kinds, such as dreams, insomnia and fatigue, all of which related once again to the individual’s experiences, sensations, testimonies and self-reports (Ibid.). Third, and perhaps most importantly for our purposes, the practices and techniques that eventually came to constitute the sleep laboratory resulted in the substitution of technical or technological instruments to monitor and measure sleep, thereby effectively bypassing individual or personal testimonies and reshaping sleep as an ‘object’ of scientific inquiry. Knowing something about sleep in this latter case, as Kroker appositely puts it, implied knowledge originating in the ‘sleep of *others*’, including both human and animal subjects (2007: 6).<sup>2</sup> A fourth key point flows from these first three points: namely, that what we see here in these transformations are a series of different ways in which sleep is framed, fashioned, figured, formed, traced, tracked, positioned, problematised, understood and unravelled: *different ways*, in effect, *of knowing and visualising sleep*. This, moreover, echoing themes and issues discussed in Chapter 4, includes a dynamic history of oscillating relations or interrelations between sleep and dreaming which themselves are far from simple or straightforward (cf. Pick and Roper 2004).

Our starting point here then concerns the ways in which sleep came to be *known* as an *object* of scientific or technoscientific investigation in its *own right* (rather than a mere *secondary* or *subsidiary* concern), and how, in the process, knowledge about sleep and its very ‘nature’ *changed, morphed* or *mutated*. This, moreover, includes the *institutionalisation*

of this new scientific knowledge of sleep's 'architecture' and 'rhythms' in the very *architecture of the sleep laboratory* and the associated socio-material tools, technologies and relations housed therein to monitor, measure, map, mend or manipulate sleep in this way.

A number of critical or notable developments in the history of sleep research may be pointed to in this regard (Kroker 2007), including: (i) the *encephalitis lethargica* epidemic of the 1920s which brought the concept of a 'sleep centre' in the brain – courtesy of Economo's (1931, 1930, 1928) clinical description and experimental work – to the forefront of neurological research; (ii) the influence of Pavlovian thinking, particularly Pavlov's method of conditioned reflexes, on the study of sleep as a 'generalised inhibition' (Pavlov 1928, 1927, 1923), which in turn fuelled further work on the *physiological* dimensions of sleep; and (iii) the role of the electroencephalograph (EEG) – first developed by the German physician Hans Berger in 1925 (see Berger 1930) – as a research tool which enabled the monitoring and measurement of electrical brain waves (Kroker 2007).

The EEG in particular proved critical here in brokering or bringing about these transformations. Its relevance to the study of sleep nonetheless, as Kroker (2007) rightly notes, was not immediately obvious or apparent. It was not until 1935 that the utility of the EEG as a sleep recording instrument or device was successfully demonstrated, through the work of Alfred Loomis and colleagues in Tuxedo Park New York (Loomis et al. 1935a, b). Tracing sleep through the EEG, in effect, resulted in the identification of what, for the first time in history, came to be categorised as five distinct 'sleep stages' (labelled A–E) through which the sleeping subject's brain cycled throughout the night. This work in turn proved critical to the subsequent uptake of EEG recordings

of sleep by other investigators across the United States, notably the work of the physiologist Nathaniel Kleitman whose sleep laboratory at the University of Chicago was not simply the first to be organised around the study of sleep but subsequently 'remained at the heart of the American study of sleep research for decades' (Kroker 2007: 205–6).<sup>3</sup>

These developments in turn occurred in the context of a broader 'revival' of scientific interest in dreams in the 1950s (Kroker 2007), within which the next, and perhaps most significant, development or landmark in the official history of sleep science is located. Although observations had previously been made of rapid eye movement during sleep, the 'discovery' in the early 1950s by Aserinsky and Kleitman (1953) that dreams were associated with rapid eye movements (REM) in sleep, proved critical to the subsequent, though not immediate, changing fortunes of sleep research as a scientifically credible enterprise. As Aserinsky and Kleitman conclude in what has now come to be regarded as a classic or landmark paper in the history of sleep science, published in the same year that Watson and Crick discovered DNA:

The fact that these eye movements, EEG pattern, and autonomic nervous system activity are significantly related and do not occur randomly suggests that these physiological phenomena, and probably dreaming, are very likely all manifestations of a particular level of cortical activity which is encountered during sleep. An eye movement period first appears about 3 hr after going to sleep, recurs 2 hr later, and then emerges at somewhat closer intervals a third and fourth time shortly prior to awakening. This method furnishes the means of determining the incidence and duration of periods of dreaming. (1953: 274)

Subsequent collaboration between Dement and Kleitman, following Aserinsky's departure from Kleitman's laboratory, carried this work forward through continuous all-night recordings, thereby building up an extensive and systematic body of data on the intricate pattern or architecture of a 'typical' night's sleep, which Dement and Kleitman summarise in the following terms:

The usual sequence was that after the onset of sleep, the EEG progressed fairly rapidly to Stage 4, which persisted for varying amounts of time, generally about 30 minutes, and then a lightening took place. While the progression from wakefulness to Stage 4 at the beginning of the cycle was almost invariably through a continuum of change, the lightening was usually abrupt and coincident with a body of movement or series of movements. After the termination of Stage 4, there was generally a short period of Stage 2 or 3 which gave way to Stage 1 and Rapid Eye Movements. When the first eye movement period ended, the EEG again progressed through a continuum of change to Stage 3 or 4 which persisted for a time and then lightened, often abruptly, with body movement to Stage 2 which again gave way to Stage 1 and the second Rapid Eye Movement period. (1957: 679)

Sleep then from this moment onwards could no longer be regarded, in scientific terms at least, as a 'passive' state, a time of brain 'idling' or 'inactivity', or even simply EEG 'slowing' (Dement 2000). A basic duality or division was now firmly established between REM and NREM sleep, moreover, with standardised terminology, techniques, technologies and scoring systems established for these 'distinct' sleep stages in human subjects.

It was in this context that the Association for the Psychophysiological Study of Sleep (APSS) formed in the early 1960s. The notion, as Kroker (2007: 13) comments, of a 'marriage' between psychoanalytic concepts and practices and the scientific study of dreams in the 'dream laboratory' was an early aim or ambition for many members of the APSS who conceptualised REM, initially at least, in Freudian terms. The subsequent development of the APSS, however, tells a different story of an increasing move *away* from any such Freudian dreams, desires or ambitions in favour of a more through-going *psychophysiological* emphasis or focus, shorn of psychoanalytic theory, concepts and practices (Kroker 2007). By invoking *sleep rather than dreaming*, in other words:

the APSS's very name carved out a new space that distinguished laboratory-based research from any Freudian or behaviourist antecedents...Its emphasis was on *defining the parameters of normal sleep* through an *intercalibration* of physiological measures in sleep and wakefulness, and an *intracalibration* of the various sleep stages, whose function remained mysterious. (Ibid.: 332, my emphasis)

That the Association for the Psychophysiological Study of Sleep would later come to be renamed or rebranded as the Associated Professional Sleep Societies is itself revealing in terms of the subsequent shift or transition to more *clinical* concerns, of which more shortly. In both guises or incarnations nonetheless, Kroker (2007) notes, the APSS gave formal organisational or institutional expression not simply to these trends and transformations in sleep research but to the careers of those who, through these new forms of knowledge and associated tools, techniques and



technologies, were coming to 'know' sleep in these newly configured ways. No longer construed as the mere 'absence' of wakefulness, to repeat, sleep was now an 'active' process, a dynamic property of the brain, the stages and rhythms (i.e. the architecture) of which could now be discerned, deciphered, detailed and documented through this growing network of expertise, institutionalised through the APSS and the architecture of the sleep lab.

The subsequent decline of interest in dreams or dreaming within this new technoscientific assemblage or configuration of sleep research was far from total, however. Nor, of course, did it dim or diminish interest in dreams and dreaming in personal life or the wider realms of popular culture (cf. Smith 2009 and Chapter 4, this book). Like the return of the repressed with which, in its Freudian guise or psychoanalytic incarnation, it was associated, the battle over dreams has indeed rumbled on, albeit as a somewhat muted or marginal theme inside sleep research and sleep medicine proper.

On the one hand, we may point to the psychophysiological or neuroscientific 'assault', or at least challenge to, psychoanalytic theories and concepts of dreaming, including Jouvett's experiments with cats' brains and other subsequent work on the anatomy, physiology and neurochemistry of dreams and dreaming (Jouvett 1965; Jouvett and Mounier 1960; Jouvett et al. 1959). We see this very clearly, for example, in Hobson and McCarley's (1977) 'activation-synthesis model' – in which REM originates deep within the brain stem courtesy of a small cluster of cells in the *pons* and the work of associated neurochemicals, such as acetylcholine to 'switch it on', and noradrenaline and serotonin to switch it 'off' – a theory, in keeping with the foregoing trends and transformations in sleep science, which effectively turns dreaming

into a primarily *neurophysiological/neurochemical* rather than a psychological phenomena. We do not, in other words, contra Freudian renditions of these matters:

Dream because our unconscious wishes and drives would, if undisguised, wake us up. We dream because our *brains* are activated during sleep, and we do so even if our primitive drives are turned on by that activation. In fact, such drives are not concealed. Rather they are revealed in dreams. It is the specific *neurophysiological details* of that activation process, not psychological defence mechanisms, that determine the distinctive nature of dream consciousness. (Hobson 2002: 158, my emphasis)

Dreams in this respect, alongside fears and phobias, anxiety and depression, anger and rage, become prime expressions of '*brain activation in sleep and waking* that have their own deep and compelling reasons for being' (Hobson 2002: 158; see also Hobson et al. 2000, 1975). These reasons indeed, from this viewpoint, are revealed not through the psychoanalyst's couch and the vagaries of free association, but through the instrumental logic and precision of (deep) brain research in the late twentieth and early twenty-first centuries.<sup>4</sup>

On the other hand, however, we may also point to further attempts to *recover, rescue* or *rehabilitate* psychoanalytic theories and concepts of dreaming in this neuroscientific light, including recent strands of work within the hybrid discipline or enterprise of so-called neuropsychanalysis. Solms (2009, 2007; Solms and Turnbull 2002), for example (himself a trained psychoanalyst and neuroscientist who has been at the forefront of these developments in recent years), points to the accumulating body of (neuro)

scientific evidence which challenges or problematises the division between REM (dreaming) and non-REM (non-dreaming) sleep, in favour of a continuous process of dreaming characterised by variability *within* and *between* sleep stages – see, for instance, Foulkes (1996, 1966). This in turn, Solms suggests, opens a possible doorway or *pathway back to Freud*. Current neuroscientific evidence indeed, from this perspective:

gives us every reason to take seriously the radical hypothesis – first set out in Freud’s book a hundred years ago – that *dreams are motivated phenomena, driven by our wishes*. (2007: 144, my emphasis)

It is also, Solms continues:

compatible with Freud’s concept of when and how the dream process is initiated (i.e. by an arousing stimulus which activates the emotional and motivational systems) and where and how it terminates (i.e. by abstract thinking in the memory systems which is projected backwards in the form of concrete images onto the perceptual systems). (2007: 146)

There has in other words, from this neuropsychanalytic viewpoint, been an *overestimation* of the part played in dreaming by (REM) mechanisms which do not arise from mental life (Solms 2007: 148).

What we see here then, to summarise, is a series of transformations in the very ways in which sleep and dreams, and their dynamic relations to one another, have been configured and understood during the twentieth century, both *epistemologically* and *ontologically* in terms of shifting

forms of knowledge and *institutionally* through the emergence of the sleep laboratory and associated professional organisations such as the APSS which have mobilised around sleep. To speak of the ‘architecture’ of sleep in this respect is to invoke once again a double point of reference involving both the ‘discovery’ of distinct sleep stages and their relation to dreams and dreaming, and the architecture of organisations such as the APSS and the modern-day sleep laboratory which may be regarded as prime institutional expressions and loci of this knowledge, including an elaborate array of instruments and (all-night) recording devices designed to measure and monitor sleep. Within this configuration of scientific knowledge and expertise, as we have seen, the ‘truth’ of sleep could no longer be reliably discerned or validly deciphered from the subjective reports or testimonies of the individuals concerned, or the vagaries of personal experience (cf. Kroker 2007). Rather it came to be known through impersonal instruments such as the EEG to trace the electrical signals or signatures of the brain, and associated standardised criteria and scoring systems within the sleep laboratory, where subjects slept throughout the night while their sleep was continuously recorded courtesy of technicians and sleep scientists.

This in turn, however, suggests a further intriguing facet of sleep research which, as we have seen, first began or set off by tracing the patterns and parameters of ‘normal’ sleep in an objective way rather than the ‘pathological’ symptoms generated from individual consciousness (Kroker 2007: 328). How then, we might profitably ask, did this latter-day *clinical concern* with sleep and its attendant pathologies or maladies materialise? It is to this very question that we now turn in the next section of this chapter.

### ***Translating sleep: from the laboratory to the clinic***

People have doubtless always had sleep ‘problems’ in one form or another. Associations between sleep, health and hygiene, moreover, date back many centuries, as do proposed ‘remedies’ or ‘treatments’ for sleep problems – from praying, dream interpretation and appeasement of the gods, through blood letting, diet, exercise, music and meditation, to medications such as theria, opium and bromide, modern-day pharmaceuticals such as benzodiazepines and the new generation of so-called Z drugs (i.e. zaleplone, zolpidem, zopiclone), and other latter-day forms of intervention such as cognitive behaviour therapy (CBT) (see Dannenfeldt 1986; Thorpy 1991; Kroker 2007, for instance).

The key issue nonetheless, for our purposes, concerns the institutional and epistemological arrangements necessary for sleep disorders to emerge if not flourish in the late twentieth and early twenty-first centuries. How, in other words, could these sleep ‘problems’ become bona fide medical ‘disorders’ or ‘pathologies’, ripe for diagnosis and treatment in the modern-day sleep clinic?

The first potential candidate to qualify on this count was *narcolepsy*. Initially documented and described as an independent disease entity in 1880 by the French physician Gélinau (1880), narcolepsy remained a contested, controversial condition (Kroker 2007), with some considering it a product of a brain lesion located in the ‘sleep centre’ within the diencephalon (i.e. a neuroanatomical explanation) and others considering it a mental illness (i.e. a psychological explanation or psychogenic emphasis) with somatic manifestations (e.g. Levin 1934; Adié 1926; Camp 1907). This moreover, as Kroker (2007) notes, included psychoanalytic

interest in narcolepsy in the immediate post-war period in America, whereby narcolepsy was thought to be a symptom of underlying mental conflicts and the dynamic forces of the unconscious mind.

The sleep laboratory in this respect, as previously noted, helped broker or resolve this conflict through the EEG, which provided a new level of diagnostic precision to the disorder through instrumental means. At stake here, in other words, was a sort of diagnostic 'make over', as Kroker (2007: 344–5) appositely puts it, which happened first in Chicago through the work of Rechtschaffen and colleagues – based on a new diagnostic system of narcoleptic symptoms, EEG recordings of sleep stages and differential diagnosis – the crux of which revolved around the patient's abnormal (i.e. rapid or early arrival) REM periods or profile (see, for example, Dement 2000, 1993; Rechtschaffen et al. 1963). Reconfigured in this fashion, narcolepsy therefore helped establish sleep research and diagnosis through the sleep laboratory as a '*distinct form of medical practice* that was related to, but not reducible to, neurology or psychiatry' (Kroker 2007: 348).

Narcolepsy nonetheless was a relatively rare disorder. *Insomnia*, in contrast, was a far more common complaint. Like narcolepsy, however, insomnia also proved a problematic condition around which sleep medicine could develop or flourish as an independent branch, field or specialty in the late twentieth and early twenty-first centuries (Kroker 2007). On the one hand, to repeat, insomnia clearly trumped narcolepsy as a common or widespread complaint rather than a rare condition. On the other hand, it stubbornly remained an elusive complaint given its ambiguous or dual status as 'part psychological disorder and part somatic complaint' (Ibid.: 395). Insomnia, in other words, was a condition characterised more by controversy than consensus,

idiosyncrasy than typicality, regarding its nature and status, including diagnostic difficulties and frequent discrepancies between subjective and objective estimates of sleep loss.

Growing concerns from the 1960s onwards, moreover, regarding the safety and efficacy of prescription hypnotics, particularly the problem of drug 'dependence' (Kroker 2007), changed both the image of the 'insomniac', or person with insomnia, and the fortunes of the sleep laboratory as a place where the safety and efficacy of prescription and over-the-counter remedies for sleep problems could be properly studied and evaluated (see, for example, studies by Kales and Kales 1970; Williams and Agnew 1969; Oswald 1968; Freeman et al. 1965; Oswald and Priest 1965). A 're-tooling' of the sleep laboratory occurred here in effect in this more clinical or evaluative direction (Kroker 2007). The Institute of Medicine (IoM) Report (1979), published a year after Hartman's (1978) influential popular book *The Sleeping Pill* – a book which charged the sleeping pill with contaminating or corrupting the genuine therapeutic encounter between doctor and patient – gave further voice to these concerns, following several decades of critical press coverage of tranquilliser use in medical practice and calls from experts in the field of drug abuse that barbiturates should be banned and prescriptions restricted to alternative sleeping pills (Kroker 2007). Insomnia then, as this suggests, was a nexus or nodal point at this time around which a variety of concerns and agendas converged or coalesced and in which the problems of drug dependence loomed large.

Other important developments in sleep disorders medicine were also occurring at this time, however, including the first systematic attempts to develop *diagnostic classifications* and the spread of sleep clinics across North America (Kroker 2007). Comparison of diagnostic classifications over

time are revealing on this count. Within the first *Diagnostic Classification of Sleep and Arousal Disorders* (DCSAD), for instance – published in 1979 by the Association of Professional Sleep Societies (APSS) and the Association of Sleep Disorders Centres (ASDC) – the emphasis, as Kroker (2007: 389) rightly notes, was placed on *symptoms* rather than signs. The DCSAD, in this respect, was organised around two main categories: (i) Disorders Initiating or Maintaining Sleep (DIMS) such as insomnia, or more correctly the insomnias in the plural; and (ii) Disorders of Excessive Somnolence such as narcolepsy.

The 1990 *International Classification of Sleep Disorders* (ICSD), in contrast, which subsequently replaced the DCSAD, effectively dispensed with symptoms in favour of psychophysiological *signs* generated by polysomnography (PSG) and the Multiple Sleep Latency Test (MSLT) (American Sleep Disorders Association 1990).<sup>5</sup> Within this new classificatory system or regime, insomnias and hypersomnias (including narcolepsy) were collapsed into the overall category of *dyssomnias*. These in turn were contrasted to the *parasomnias* (such as sleep paralysis, sleepwalking, sleep bruxism and nightmares), *sleep disorders associated with other disorders* (i.e. mental, neurological and other mental disorders) and finally the tantalising or aspirational category of *proposed sleep disorders* (such as persistent short sleepers, long sleepers, menstrual-associated and pregnancy-associated sleep disorders) for which there is 'insufficient information' at present to confirm their acceptance as definite sleep disorders. Idiosyncrasies regarding the insomniac's symptoms, as such, 'were relegated to the margins of the ICSD' (Kroker 2007: 394).

By 1997, however, some further albeit *minor revisions* were deemed necessary, with the title duly changed to



the ICSD-Revised (ICSD-R), and the authorship changed from the 'Diagnostic Classification Steering Committee, Thorpy, MJ, Chairman' to the 'American Academy of Sleep Medicine' (AASM 2001/1997). Since its introduction in 1990, the Chair of the American Association of Sleep Medicine Nosology Committee states in the Foreword to this revised edition, the ICSD has:

gained wide acceptance as a *tool for clinical practice and research in sleep disorders medicine*. The years between 1990 and 1997 have witnessed *wide-ranging changes in sleep disorders medicine* from many perspectives: the growth of managed health care reform; efforts to better integrate sleep disorders medicine into the community medical specialities; major efforts at improving public awareness of the serious toll of sleep disorder; and – perhaps most importantly – *a rapid growth in our understanding of the pathophysiology and effective treatment of sleep disorders*. (Buysee 2001/1997: v, my emphasis)

Such changes furthermore, it is noted, represent a:

fundamental challenge to any classification of diseases and disorders... On the one hand, research and clinical developments have clearly changed the way we view sleep disorders, most notably sleep-related breathing disorders. On the other hand, frequent major changes in a classification of disorders can be disruptive for both clinical and research practice... Moreover, *clinical and research progress has varied widely across disorders in the ICSD*. Although we have greatly improved our knowledge about some sleep disorders, the essential features of other disorders (not to mention their epidemiology, pathophysiology, and

treatment) *remain in the realm of expert opinion.* (Buysee 2001/1997: v, my emphasis)

Further significant changes are nonetheless evident by the time of the second ICSD in 2005, a 300-page manual covering more than 80 discrete disorders based on the consensus opinion of more than 100 sleep specialists worldwide (American Academy of Sleep Medicine 2005). These disorders are now organised within the ICSD-2 into eight major categories based on a variety of considerations, including *complaint* (such as insomnia, hypersomnia, parasomnia and sleep-related movement disorder), *presumed aetiology* (such as circadian rhythm sleep disorders) or the *organ system* from which the disorder arises (such as sleep-related breathing disorders), with two appendices for the classification of sleep disorders associated with medical or psychiatric disorder. Classification of sleep disorders within the WHO *International Classification of Diseases* (ICD-9-CM) – now supplanted by the new ICD-10 (WHO 2007) – was also revised at this time in order to establish greater *concordance* between the systems with many, though not all, sleep disorders grouped into a new single series with ‘Diseases of the nervous system’. While publication of ICSD-2 and associated changes moreover have made a number of *DSM-IV* sleep codes obsolete, this discrepancy is likely to be addressed when *DSM-V* is published.

Of all these sleep disorders, nonetheless, one in particular, *sleep apnoea*, stands out in the ‘making’ of modern-day sleep medicine (Kroger 2007). While insomnia, for the reasons discussed above, has indeed proven a problematic condition around which sleep medicine could develop or flourish as an independent specialty, and while the condition as such (despite its high prevalence and the sheer

volume of hypnotics prescribed to 'treat' it) became increasingly 'marginal' to the main business of sleep medicine (Kroker 2007: 394),<sup>6</sup> the organic nature and basis of sleep apnoea provided precisely the sort of biomedical platform needed, particularly when construed or constructed as a significant if not major public health problem or issue – see, for example, Phillipson (1993); Pack et al. (2006). This did not occur overnight, however, and was not achieved without a struggle. In order for this problem to emerge indeed as a distinct pathophysiological entity, with considerable biomedical scope or potential for expansion in the clinic and wider public health domain, a variety of negotiations and disputes occurred from the 1980s onwards involving sleep researchers, clinicians, patients and even engineers involved in the design of CPAP technologies, with differing forms of knowledge, experience, expertise; thereby underlining the dynamic creation if not 'invention' of this condition and the technologies devised and deployed to diagnose and treat it (cf. Moreira 2006).

The official backdrop or history to the emergence of sleep apnoea as a recognised clinical condition of course is well rehearsed within the annals of sleep science and sleep medicine. This, for example, includes: (i) a seminal description of so-called Pickwickian syndrome – prompted by Dickens' character Joe, a fat sleepy boy in *Pickwick Papers* (Dickens 1909/1836–7; see also Cosnett 1997) – by Burwell and colleagues in 1956 in the *American Journal of Medicine*; (ii) the subsequent establishment of the obstructive sleep apnoea syndrome (OSAS) diagnostic category during the 1970s (Guilleminault et al. 1973); and (iii) the replacement of tracheotomy by continuous positive airways pressure (CPAP) technology as the treatment of choice in the 1980s (Sullivan et al 1981).

A series of convergences and divergences of opinion, if not disputes, nonetheless, as Moreira (2006) rightly notes, are evident here, particularly between *respiratory medicine* and *sleep medicine* over the precise pathways and mechanisms involved in the condition and the role of the *sleep laboratory* in its detection or diagnosis. This, broadly speaking, can be characterised as a difference between an approach which associated obesity with sleepiness and centred around the presence of clinical symptoms and the composition of blood gases, and an approach which accorded a central role to a sleep disorder (OSAS), detected and diagnosed in the sleep laboratory, as the aetiological agent in the resulting clinical picture (i.e. Pickwickian obesity, somnolence, plethoric (red) face and so on) which pulmonologists observed in their patients (Ibid.). Growing recognition and acceptance of this condition nonetheless, coupled with the progressive use of objective sleep study measures such as the Apnoea/Hypopnoea Index during the 1980s and 1990s, resulted in a predominance of chest physicians (i.e. pulmonologists/respiratory physicians) within the American Sleep Medicine Association (ASMA) by the 1990s, who headed up sleep laboratories or clinics. The definition, diagnosis and management of OSAS as a consequence is perhaps best regarded as a sort of hybrid splicing or 'mixture of the two definitions of the condition and the practices of medicine they embody' (Moreira 2006: 58). What emerged from this controversy, in other words, was a:

*new space of biomedical intervention and representation* that has created a set of objects, entities and practices. These are the outcome of the interaction and the mutual enrichment between two different forms of relating medical knowledge and practice. In the process, collaborative

links between sleep researchers and chest physicians were forged, and novel redistributions of accountability between clinicians, researchers and patients were established. (Ibid., my emphasis)

The development, deployment and uptake of CPAP technologies has also of course, Moreira (2006) stresses, been a critical part of the picture or story here, not simply in terms of the collaborations between physicians and medical engineers it involved and entailed, nor in terms of ensuing controversies over its effectiveness (Wright et al. 1997a, b) and associated struggles to get it approved and funded within healthcare systems such as the NHS, but in terms of the subsequent 'problems' which have come to be framed around so-called patient adherence or compliance and efforts to optimise its usage – see, for example, Cartwright (2008); Engleman and Wild (2003). What we see here, in other words, is a situation in which the apparent scientific/clinical expert consensus as to the benefits of CPAP contrasts with *ongoing problems of use for CPAP patients in everyday or every night life* outside the sleep laboratory or sleep clinic (Moreira 2006).

Patient testimonies of the benefits of CPAP usage nonetheless also constitute a powerful resource which may be deployed to good effect for both professional and public purposes. A recent edition of *Wellcome News* (2009), for example, includes an article on 'life with sleep apnoea'. The article in question features the case of Mr Frank Govan, a retired tax consultant, who for years we are told experienced 'intense tiredness' (or feeling 'zombified', as he describes it) and whose tiredness apparently had become a 'standing joke among his friends'. Mr Govan indeed, readers are informed, once 'fell asleep at the wheel whilst driving his family in the

fast lane of the M6. Luckily no one was hurt' (2009: 4). Years of 'fruitless visits' to his GP followed as 'diagnosis remained elusive' until eventually he was referred, thanks to a chance remark by his wife to an ENT consultant at a dinner party, to a sleep specialist and diagnosed with obstructive sleep apnoea. Mr Govan, we are told, now uses a CPAP machine to keep his airways open at night, the effects of which (even 'after just one night of CPAP'), are described as truly 'spectacular'. 'I felt refreshed and my energy had returned,' Mr Govan is quoted as saying. 'I had my life back' (Ibid.).

This personal storyline is in turn embedded in both factual reportage of OSA and CPAP technology, including a 'sleep apnoea at a glance' inset box, and the profiling of Dr Mary Morrell who, readers are told, has 'dedicated her career' to studying the condition. The article also features a picture of Mr Govan wearing his CPAP mask, juxtaposed with a picture of Dr Morrell, and another feature box entitled 'You can't breathalyse for sleepiness', in which it is noted: how OSA is associated with increased *risk* of road traffic *accidents*; how bus and lorry drivers are at a particular risk of sleepiness-related accidents, and; how, according to Dr Charles George, University of Western Ontario, Canada, 'more data are needed for society to establish and accept a "safe" sleep apnoea cut-off for driving akin to that for alcohol' (*Wellcome News* 2009: 5) – see also George (2007).

Obstructive sleep apnoea (OSA) then, to summarise, has indeed relatively speaking proved a relatively effective vehicle or platform for sleep science and sleep medicine to mobilise around as a significant public health issue, not least through its links with obesity and cardiovascular risk and the associated risks and dangers it poses both to self and others in terms of excessive daytime sleepiness. This in turn is rendered all the more significant, as a further

guarantee of the diagnostic significance of the sleep laboratory or clinic, by the fact that many OSA sufferers remain *unaware* of the condition, given its occurrence while they sleep – the only daytime trace or symptom being, as the above case of Mr Govan suggests, unexplained sleepiness and associated clinical symptoms detectable or decipherable by a doctor or specialist. As Dement puts it, in alarming or arresting terms:

Apnoea is an *unrecognised killer*, but it is hiding in plain sight. Every night more than 50 million Americans stop breathing... It never ceases to amaze me that sleep apnoea victims can awaken hundreds of times in a single night and remember nothing of that torment. The *severe consequences* of the disorder and its *very high prevalence* make it *one of the most serious general health problems in America*. (1999: 168, my emphasis)

Diagnosed in the sleep clinic, treated through CPAP technology and positioned as a significant public health risk, OSA then (the 'midnight strangler' as Dement (1999) dubs it), provided sleep medicine with precisely the sort of opportunity it had been looking for. This, for example, is evident in the growing number of clinicians certified in sleep medicine, and the associated growth of sleep clinics in which OSA, the most commonly diagnosed sleep disorder nowadays, could be detected, deciphered, diagnosed and treated.

As with the past evolution and emergence of sleep science, however, these *trends in sleep medicine are more pronounced in North America* than elsewhere. The *American Academy of Sleep Medicine* (AASM), for example, now consists of over 7000 physicians, researchers and other healthcare professionals who specialise in studying, diagnosing and treating

disorders of sleep and daytime alertness such as OSA, narcolepsy and insomnia, with more than 1000 sleep centres and laboratories now formally accredited by the AASM ([www.aasmnet.org/](http://www.aasmnet.org/)). Sleep medicine, as this suggests, is now big business in North America, with significant opportunities for the enterprising physician (see, for example, Norbutt 2004). The typical US sleep laboratory, for instance, according to recent market data, has revenues in the region of US \$1.33 million and conducts approximately 1250 sleep studies per year; figures which, when finally tallied and totalled up, amount to a staggering market worth around US \$5 billion (Reichen 2009: 485–6).

While OSA continues to be a key condition in much of this clinical work, however, ‘circadian rhythm sleep disorders’, such as so-called shift work sleep disorder (SWSD), also open up other potential avenues or opportunities for *biomedical expansion*; particularly, returning to themes first aired in the opening chapter of this book, in the so-called 24/7 economy where a significant number of the workforce are engaged in some form of shift work, and where ‘excessive sleepiness’ becomes an occupational hazard if not the norm.

Excessive daytime sleepiness (EDS), we might say, embodies and expresses precisely the amorphous and ambiguous nature and status of sleep ‘problems’ today as a ‘matter of concern’. Although typically understood in official medical or clinical terms as a *symptom* of other sleep problems or pathologies, or other medical or psychiatric conditions, there are signs moreover that EDS is now being reconfigured within the broader realms of *popular culture* as a problem if not a *pathology* in its own right. Type the keywords ‘sleepy’, ‘sleepiness’ or ‘drowsiness’ into any Internet search engine, for example, as Kroll-Smith (2003: 636) rightly notes, and many if not most hits will portray this as some



variant of 'excessive daytime sleepiness'. The impression that this is or may be a distinct disorder moreover, Kroll-Smith argues, is conveyed in a variety of ways, including: (i) omission in discussions of EDS of any obvious or explicit reference to it as a 'symptom'; (ii) the manner in which the very name 'excessive daytime sleepiness' and the acronym EDS imply 'a more significant identity as a bona fide medical disorder'; and (iii) the readily available and multiple websites for online self-diagnostic tests such as the Epworth Sleepiness Scale (ESS) (Johns 1991), which might 'easily assume a somatic reality against which a number becomes a meaningful piece of evidence about the relative presence or absence of a particular disorder' (Kroll-Smith 2003: 637).

Viewed in this light then, EDS stands at the nexus of both *clinical concerns* within the confines of the sleep clinic and broader concerns and imperatives within *popular culture*, which are serving to reconfigure this soporific state and somatic complaint as a novel problem (or *proto-disorder* perhaps) amenable to self-diagnosis on the Internet (Kroll-Smith 2003). This in turn throws into critical relief not simply the apparent *gap* between self-reported sleep troubles and the routine clinical gaze of everyday (front-line) medical practice, but also perhaps, as Kroll-Smith (2003) provocatively suggests, the growing significance of popular culture in the very creation of medical 'problems'.<sup>7</sup>

### **Medicalisation redux: biomedicine, health and the management of sleep in everyday/night life**

Implicit in the foregoing developments and debates are a further series of critical socio-political questions, worth

spelling out at this particular juncture, concerning the medicalisation or biomedicalisation of sleep over time. What, in other words, do the foregoing issues tell us about the actual or prospective biomedicalisation of sleep, and what further light does this shed on the governance of alert/sleepy bodies and the biopolitics of sleep and wakefulness in the late modern age? Can particular relays, for instance, be traced or tracked here between sleep science/medicine, self-help and corporate governance in the name of health or virtue, wisdom or well-being, enterprise or enhancement?

Much has been written in recent decades, both inside and outside the academy, on the expansion of medical jurisdiction and control over more and more areas of our lives in the name of health and illness, disease and disorder. Medicalisation, in this respect, denotes the process whereby hitherto 'non-medical' matters become transformed or translated into 'medical problems' such as 'illness', 'disorder' or 'syndromes' of one kind or another (Conrad et al. 2010; Conrad 2007, 2005, 1992). Medicalisation in turn may occur at a number of different *levels* – i.e. *conceptually*, when a medical vocabulary is adopted to describe a problem; *institutionally*, when an organisation adopts a medical approach to a problem; and *interactionally* within the doctor–patient relationship, for instance (Conrad 1992). It may also occur to varying *degrees*, with varying *involvements* on the part of doctors, and is in principle though seldom in practice a *bi-directional* process whereby de-medicalisation may occur over time. While medicalisation moreover describes or denotes a social process, and while some commentators and critics have raised legitimate concerns about the 'over-expansion' of medical control or the 'over-medicalisation' of our lives

if not outright cases of 'disease-mongering' (Moynihan and Cassels 2005), medicalisation is ideally a descriptive term that does not necessarily imply a value judgement on these matters. Medicalisation indeed may involve both 'gains' as well as 'losses' and have positive as well as negative faces which are best studied and judged on a case-by-case basis, including the financial 'costs' as well as the personal and social consequences of these processes (see, for example, Conrad et al. 2010).

Recent years have also witnessed a growing number of calls to go 'beyond' medicalisation, at least as conventionally configured and understood within medical sociology, including the aforementioned claim that many forms of medicalisation are now better understood as outright cases of 'disease-mongering' – given the huge profits to be made out of convincing ('healthy') people they are 'sick' and thereby 'selling sickness' for a 'healthy' profit margin (Moynihan and Cassels 2005). Perhaps most significantly of all for our purposes, it is clear that the 'engines' or 'drivers' of medicalisation have shifted over time (Conrad 2007, 2005), not least through the rapid pace of developments in bioscience and biotechnology today, prompting writers such as Clarke et al. (2003) to speak of a shift or transition to a new phase of 'biomedicalisation'. The 'bio-' prefix in this respect is intended to signify a new era of 'technoscientific biomedicine' which is becoming increasingly 'complex', 'multisited' and 'multidirectional', including significant new opportunities to not simply *control* but to *customise* bodies, and which conveys important transformations now taking place in 'both the organisation and practices of contemporary biomedicine, implemented largely through the integration of technoscientific innovations' (Ibid.: 161–2).

A number of points are worth stressing or spelling out in this regard in relation to sleep as both a further elaboration on the foregoing themes and issues considered in this chapter so far, and an update on my previous thinking on the medicalisation of sleep (Williams 2005, 2004, 2002).<sup>8</sup>

First and foremost, sleep very clearly fits more or less readily into the picture here as a rich and fascinating case study of the *changing dynamics of biomedicalisation* over time, and the complexities, controversies, convergence and contradictions contained therein. This, for example, includes not simply the dense, diverse, dynamic relays and relations between the sleep laboratory and the sleep clinic, and the associated tensions, transitions and translations between sleep science and sleep medicine, but a variety of other trends and transformations over time, such as the growing power and influence of the pharmaceutical industry; the blurred or shifting boundaries between therapy and enhancement; the changing role and expectations of patients, consumers and other pressure or advocacy groups; the growing salience and significance of popular culture and new media in construction if not contestation of sleep 'problems' or sleep 'matters' today; and finally the production or potential production, in and through these very processes, of new individual and collective identities and forms of activism.

A number of potential problems and paradoxes also arise here nonetheless, as we have seen, thereby making the biomedicalisation of sleep a far from simple or straightforward process. The historical challenges and problems of transforming sleep into an 'object' of scientific study, in this respect, have been matched by the tensions and difficulties of *translating* sleep into a biomedical problem and matter of public health and safety. Sleep indeed, or at least certain facets and features of it, continues to pose problems

for biomedicine, given its peculiarities and paradoxes, while sleep medicine itself is really only now, it seems, *beginning* to emerge from its relatively minor or marginal status as a specialism, within North America at least. Unlike many other forms of diagnosis, moreover, sleep requires the whole patient or proto-patient to surrender consciousness and succumb to sleeping in the artificial, time-consuming, technologically intensive conditions of the sleep laboratory throughout the night in order to record or trace (courtesy of the laboratory technician) and diagnose (courtesy of the sleep doctor or physician) the problem or condition in question (Kroker 2007: 15). If we add to this the aforementioned problem of conditions such as insomnia as a stable base or platform to biomedicalise around; related crises and controversies surrounding the safety and efficacy of sleeping pills; struggles over the precise nature and status of OSA and associated design, development, reimbursement and patient 'compliance' issues regarding CPAP technologies; the fact that specialist or professional 'ownership' over sleep problems or disorders remains patchy and problematic; the often complicated if not chaotic patient trajectories through healthcare; ongoing claims and criticisms regarding the extent of undiagnosed and untreated sleep 'problems' in our midst; and the lack of basic medical education and training in sleep disorders medicine, and one may well be forgiven for concluding that the biomedicalisation of sleep is a non-starter.

For medical writers such as Dement (1999) indeed, picking up on this latter point about the extent of undiagnosed and untreated sleep 'problems' in our midst, 'ignorance' of this kind is the 'worst sleep disorder of all'; a charge which in turn of course serves as a further rallying call or cry regarding the importance of sleep for society in general and the

dangers and risks of sleep problems in particular. 'If even the basic facts about sleep,' Dement ventures:

had been known and understood by the general public and its doctors over the years, there's no way of knowing how many human beings now dead – possibly millions; perhaps even relatives of yours – might be alive today. Never before in human history has a *disparity between the amount of scientific knowledge and the benefits of that knowledge to society* been so tragically vast. (1999: 3, my emphasis)

Perhaps more correctly, therefore, it is safer to say that the biomedicalisation of sleep, for better or worse, remains *partial and incomplete*. An ongoing process, that is to say, subject to ebbs and flows, if not elements, of reversal or resistance. This in turn suggests a need to avoid broad references to the biomedicalisation of sleep in favour of more detailed case or condition-specific forms of analysis. Thus while insomnia, as previously noted, poses ongoing challenges and problems in terms of any simple or straightforward process of biomedicalisation (Williams et al. 2008; Kroker 2007), conditions such as narcolepsy and OSA have indeed proved more fertile soil for the seeds of biomedicalisation to take root and flourish. So too newer conditions such shift work sleep disorder (SWSD), a classic example perhaps of the biomedicalisation of a social problem in which pharmaceutical forms of intervention or governance in the guise of wakefulness-promoting drugs such as Modafinil loom large. There are signs moreover, as we have seen, that excessive daytime sleepiness is now being reconstructed and reconfigured in popular culture at least (i.e. outside the sleep clinic) as a condition or disorder in its own right in ways which invite us to reflect once more upon the extra-institutional, textual

or rhetorical dimension of biomedicalisation today in an information society (cf. Kroll-Smith 2003), including the possibilities of *resistance* of various kinds – see, for example, Weisgerber's (2004) study of challenges to biomedicalised understandings of sleep paralysis on the Internet.

A second key issue I wish to flag here returns us to the question of pharmaceuticals as a key biotechnology in the management or governance of sleep(iness) and the role of the pharmaceutical industry in these broader drivers and dynamics of biomedicalisation over time. The (biomedical) management of sleep problems of course includes a variety of therapies other than pharmaceuticals – with non-pharmaceutical interventions such as cognitive behaviour therapy (CBT) now recognised if not preferred as a cost-effective treatment option for insomnia (see, for example, Morgan et al. 2004). Sleeping pills or tablets, nonetheless, are clearly big business, with a global pharmaceutical market for diagnosed sleep disorders estimated to be worth around \$4.3 billion in 2005, and some forecasts predicting a 158 per cent increase on these figures to a staggering \$11 billion by 2012. 'Underdiagnosed and undertreated', moreover, Reichen (2009: 486) comments with entrepreneurial zeal, 'the sleep disorders market presents a *major opportunity* for pharmaceutical companies'. While many of these sleep medications have been on the market now for over 20 years and are therefore out of patent, and while the pharmaceutical industry in general appears to be suffering something of an innovation crisis – particularly drugs for the central nervous system (CNS) – a number of new sleep medications are also now supposed in the pharmaceutical pipeline, some reportedly now in phase II and phase III clinical trials (Alexander 2009; Reichen 2009), with some commentators and experts predicting a future of 'smarter' drugs that will

deliver precise amounts of good-quality slow-wave sleep without the disadvantages of previous generations of hypnotics (Lawton 2006).

The market or potential future market for wakefulness-promoting drugs such as Modafinil (brand name Provigil) is also another key part of the picture here. Initially approved for the treatment of narcolepsy, Modafinil is now officially licensed to treat *excessive sleepiness associated with* obstructive sleep apnoea (OSA) and shift work sleep disorder (SWSD). It is also used off-label for symptoms of sleepiness and fatigue associated with a variety of other conditions. Provigil, according to Cephalon's latest sales figures, has generated more than 12 million prescriptions and over \$3 billion in cumulative revenue to date, with Nuvigil (Armodafinil) now approved by the FDA as Cephalon's 'next generation' wakefulness-promoting agent (protected by a US patent which expires in 2023). 'Each day,' Frank Baldino (Cephalon chairman/CEO) states on the Cephalon website:

millions of people struggle with excessive sleepiness associated with OSA, shift work sleep disorder ... and narcolepsy. These are serious and chronic conditions that impair the body's ability to stay awake, stay alert, and function. Cephalon first recognised the *breadth of this medical need* more than a decade ago. We remain committed to those patients, to the sleep community, and to developing medicines that provide true patient value. (www.Cephalon.com, accessed 15 August 2009, my emphasis)

The Cephalon Nuvigil website, accordingly, includes pictures of office workers, builders and shift workers with arms raised, in triumphant poses with broad grins on their faces, and wraparound banners inviting viewers to



'rediscover wakefulness', with links to further simple (self-administered) online tests such as the Epworth Sleepiness Scale (ESS) (Johns 1991), to find out 'how sleepy' you are (cf. Kroll-Smith 2003), plus prescription advice and opportunities to 'share your story'.

Concerns in this respect are now being voiced in various quarters about the wider lifestyle or recreational market for Modafinil as a, if not *the*, drug of 'choice' in today's 24/7 era, both inside and outside the workplace: the latest pharmaceutical aid or ally, in effect, of the wide or wired-awake world (see, for example, Coveney et al. 2009; Williams et al. 2009; Wolpe 2002). The problem here, in other words, if 'problem' it is, concerns the manner in which Modafinil, like Viagra before it, serves to further blur or redraw the boundaries between the 'medical' and 'non-medical' uses and abuses of these drugs in the name of therapy or enhancement. These issues in turn, however, become all the more complicated in the case of safety-critical occupations, from transport to medicine, where pharmaceutical enhancements of various kinds (in the absence of adequate sleep) may serve legitimate social ends or purposes. Hence Chesire's provocative yet pertinent question: 'Would a pharmaceutically enhanced physician be a better physician?'<sup>9</sup>

These processes of *pharmaceuticalisation* then, if indeed we may call them that,<sup>10</sup> constitute an important strand of the biomedicalisation of sleep and wakefulness today, including a further blurring or reconfiguration of the boundaries between therapy and enhancement or the *customisation* of bodies. They are also, of course, returning to the broader point about the changing dynamics or drivers of biomedicalisation over time, part and parcel of the growing power and influence of the pharmaceutical industry over all our lives today, given industry-sponsored interests in market

maximisation. Consider for example, on this latter count, the recent House of Commons Health Committee (HCHC) Report on *The Influence of the Pharmaceutical Industry* (2005), which concluded that:

What has been described as the ‘medicalisation of society’ – the belief that every problem requires a medical treatment – may also be attributed to the activities of the pharmaceutical industry. While the pharmaceutical industry cannot be blamed for creating unhealthy reliance on, and over-use of, medicines, it has *certainly exacerbated it*. There has been a *trend towards categorising more and more individuals as ‘abnormal’ or in need of drug treatment*. (2005: 4, my emphasis)

Here we return to the question of ‘disease-mongering’ noted earlier: the charge, that is to say, that it is no longer simply a case of the manufacturing of a drug for every disorder, but the manufacturing of a disorder for every drug (Moynihan and Cassels 2005). Clearly not all cases of biomedicalisation or pharmaceuticalisation, however, involve disease-mongering. The gains and losses, risks and benefits associated with these processes of biomedicalisation and pharmaceuticalisation moreover, as I have already emphasised, need assessing on a case-by-case basis – see, for example, Woloshin and Schwartz (2006) for a recent study of restless leg syndrome. The pharmaceuticalisation of sleep and wakefulness nonetheless, in the name of therapy or enhancement, is clearly an important part of the biomedicalisation of sleep and the biopolitics of bodies today, contested or otherwise.

These developments in turn raise a third important series of questions, concerning not simply power but personhood.

To the extent, for example, that these foregoing processes of biomedicalisation and pharmaceuticalisation render sleep a problem or matter of concern today, and to the extent that they influence the very ways in which people come to know, understand, manage or govern themselves qua patients, consumers or citizens, then something potentially powerful if not profound is at work here: new 'biosocial' or 'technosocial' forms of identity and activism, that is to say, both individual and collective in kind (cf. Gibbon and Novas 2008; Clarke et al. 2003). To the extent moreover that sleep is now configured and understood, courtesy of modern-day sleep/neuroscience, as an active state of the brain, and to the extent that sleep medications, in the name of therapy or enhancement, work at the neurochemical level, then sleep constitutes another potential site or source from which, in Rose's (2007) terms, more 'neurochemical' notions of selfhood or personhood and more 'neurochemical' forms of citizenship and activism *may* arise either now or in the (near) future.<sup>11</sup>

A fourth closely related set of issues I wish to flag here concerns the increasingly complex if not contradictory relations between (sleep) medicine, self-help, corporate culture and corporate governance. While discourses regarding the benefits of sleep (and the dangers of sleep deprivation) for health are not of course particularly new or novel, what *is* relatively new, as Brown rightly notes, is 'the connection between corporate policy, management strategy and sleep-related medical and self-help advice' (2004: 174). Here we return to issues first aired in Chapter 2 about the turn, within certain (cognitively rich) sectors of the economy at least, to more 'humancentric', 'worker-friendly' or even 'sleep-friendly' policies and practices (including 'flexi-time' programmes, free gyms or yoga classes, provision or

tolerance of workplace napping, and so on), designed to improve work/life balance, reduce stress and ill-health and boost productivity and performance – see Wilson (2004), for example. This moreover, as previously noted, may include the buying or bringing in of outside consultants and therapists to speak to workers about these issues, including organised workshops on sleep-smart or sleep-wise strategies and other tips and recommendations derived from self-help books and ‘how-to’ manuals. Instructive parallels may be drawn here in this respect between the biomedicalisation of sleep/alert bodies and enhanced opportunities or possibilities for the ‘constant management’ of workers both inside and outside the workplace (Brown 2004: 174). Discourses of self-help, biomedicine and corporate management, in other words, in part at least, all depend on appeals to individual ‘self-improvement’ in which people are ‘constantly compelled to monitor and micro-manage every possible aspect of their lives’ (Ibid.: 175).

Tensions remain nonetheless, as Brown (2004: 181) rightly notes, between those such as Dement (1999) and Coren (1996), whose prime commitment is the power, promise and potential of sleep on grounds of health, safety and well-being, and those – such as Maas and colleagues (1999); Anthony (1997); Anthony and Anthony (2001); companies such as Alertness Solutions ([www.alertness-solutions.com](http://www.alertness-solutions.com)) – for whom sleep promotion or management, courtesy of sleep-‘smart’ or sleep-‘wise’ schedules, power naps and the like is primarily about performance and productivity both on and off the job. For Dement indeed, as noted in Chapter 1, modern culture has become an object lesson or living laboratory of (chronic) sleep deprivation, a ‘sleep sick society’ no less, with profound implications and powerful effects on overall health and vitality, including the

immune system response, psychological well-being, quality of life and longevity. It is high time, Dement argues, to start '*taking sleep seriously as the foundation of good health*' (1999: 9–10, my emphasis). Prescriptions for our 'sleep sick society' in this respect include basic principles and practices of *sleep hygiene* and *healthy sleep*, learning to manage *sleep crises*, taking 'age into account', and adopting a *sleep-smart lifestyle*. 'Start tonight,' Dement counsels; 'consider it *doctor's orders*' (1999: 433, my emphasis).

A fifth key point, therefore, also comes sharply into view here concerning the increasing focus or emphasis not simply on the problems or pathologies associated with poor sleep, cast in negative terms, but on the power, promise or potential of good sleep, cast in more *positive* terms, as the passport to *health, happiness* and *well-being*. A vital matter to repeat, as I have argued throughout the book, which concerns or implicates us all as sleeping as well as waking beings. Sleep in this respect, construed and constructed as an essential ingredient or integral part of health, is thus paradoxically both 'more biomedicalised' through risk factors and (self-)surveillance practices, and seemingly 'less medicalised' as 'the key site of responsibility shifts from the professional ... to include collaboration with or reliance upon the individual' qua patient or user, citizen or consumer (Clarke et al. 2003: 173). This moreover includes a variety of non-biomedical or non-orthodox expertise, such as alternative or complementary therapies, plus a variety of other sleep-related commercial products and over-the-counter remedies designed to assist in the *management* of sleep and the facilitation of a 'good' or 'sound' night's sleep.

Here we return full circle to the notion, first aired in Chapter 2, of the 'well-slept citizen' as moral duty or obligation, something to be worked at or on, and to broader

trends and transformations in corporate culture in the neo-liberal era concerning enhanced possibilities or prospects for the *constant management* or *micro-management* of individuals in all spheres of life in the name of self-cultivation, self-transformation or self-improvement (cf. Maasen and Sutter 2007; Rose 2007, 1990; Deleuze 1995; Foucault 1991, 1988). This in turn alerts us to the multiple ways in which sleep, or the promise of sleep to be more precise, is 'sold' in the marketplace. From the sleep clinic to the pharmaceutical and mattress industries, over-the-counter and herbal sleep aids or remedies to how-to books and a host of other sleep-promoting devices, gadgets, methods, mantras, tips, talismans and paraphernalia, the dreams being sold or on offer here appear to converge or coalesce around both *selling better sleep* and *selling sleep better* in order to 'feel better', 'do better', 'perform better', 'live better'; to 'improve' in some way or other, that is to say, aided and abetted by a growing *sleep industry* or 'sleep-industrial complex' (MooAllem 2007; Williams 2005; Williams and Boden 2004). In the United States alone, for example, this 'sleep aids market' (comprising mattresses, pillows, sleep laboratories and annexed services, sleep medications, CPAP sleep apnoea devices, and other retail devices), was worth US \$23.7 billion in 2007 – a growth of 77 per cent since 2000, with a further growth of 36 per cent forecast by 2012 which, if correct, would then amount to a total market of US \$32.3 billion (Alexander 2009: 496).<sup>12</sup>

At stake here then, to summarise, is the further reconfiguration or repositioning of sleep in biomedicalised terms, not simply through discourses of *deprivation* and *disorder*, but through the multiple relays or relations between self-help, biomedicine, corporate culture and corporate governance in the neo-liberal era of the enterprising if not enhanced

self. An era, to repeat, where even the seemingly most mundane, personal or private of acts, such as sleep, become something to be cultivated, captured, colonised, worked at or micro-managed in the name of health and happiness, wisdom and well-being, vigilance and virtue, productivity and performance.

### **Science fact/fiction: sleepless futures?**

Here we arrive at a final set of issues regarding the future or possible futures of sleep in the years or decades to come.<sup>13</sup>

At one level, of course, the future of sleep looks pretty much assured. All (animal) life it seems, including us human animals, sleeps and will in all likelihood or probability continue to sleep (see Siegel 2009, for example). Yet sleep, as we have also seen throughout this book, displays a high degree of *plasticity*, albeit within certain limits or parameters, which makes it amenable to management if not modification in a variety of ways in terms of prevailing socio-cultural norms or mandates, particularly those associated with work time, work culture and work ethics. To the extent moreover, as Rose (2007) notes, that the 'vital norms' of life itself are now themselves increasingly amenable to manipulation or modification in the era of bio-medical enhancement or optimisation, then this has the potential to radically undermine any fixed notion of biology as 'bedrock' or 'given' – see also Harris (2007); Savulescu and Bostrom (2008); Miller and Wilsdon (2006). We have indeed long since crossed or passed the border, boundary or threshold, itself of course constructed and bound up with the 'purity' myths of modernity (cf. Latour 1993), separating nature from culture or biology from society (Giddens 1991).

A key site here, for example, in which these futures are already actively being explored or exploited, rehearsed or played out, is the military, which itself of course involves important relays and complex relations with biomedicine, bioscience and biotechnology, including the biomedicalisation of the military and the militarisation of biomedicine (Harrison 1999, 1996; Cooter et al. 1998; Montgomery 1991). The translation of sleep into a scientific object or matter of public concern in this respect, and the commodification or customisation of sleep in medical, corporate or popular culture, is paralleled if not surpassed by its transformation into a commodity of war in the military; something to be managed, mobilised, modified, that is to say, in the service of combat and the interests of strategic advantage over one's adversaries or enemies on the battlefield or in the theatre of war.

Sleep deprivation indeed, for obvious reasons, poses a serious strategic challenge for the military, and as such constitutes perhaps the most immediate if not the most important human performance factor in sustained military operations. The military in this respect has long since been interested in new or novel ways to monitor, manage, manipulate or modify sleep in the interests of military efficiency or enhancement and hence the conferral of tactical advantage. Psycho- or neuropharmaceuticals, once again, loom large in this configuration of possibilities, alongside other neurotechnologies associated with the brain and neuroplasticity.

Consider, for example, a recent report entitled *Human Performance* – commissioned by the US Pentagon's *Office of Defense Research and Engineering* (ODR & E) and published by MITRE Corporation in March 2008 – which takes as its starting point rapid developments in the field of neuroscience, psychopharmacology and cognition that provide or promise



‘fundamental understanding of linkages among brain activity, electrical and chemical stimulation, and human behaviour’ (MITRE 2008: 1). Sleep deprivation, unsurprisingly perhaps, features prominently in the report as both a tactical problem and a target for various neuroenhancement technologies. The most ‘immediate human performance factor in military effectiveness’, for example, it is noted, is ‘degradation under stressful conditions, particularly sleep deprivation. If an opposing force had a significant sleep advantage, this would pose a serious threat’ (2008: 23). The ‘manipulation and understanding of sleep’ therefore, we are told, is ‘one part of human performance modification where significant breakthroughs should have national security consequences’ (Ibid.).

On the one hand then, as this suggests, sleep deprivation and associated performance ‘degradation’ is taken as a given on the military battlefield. On the other hand, however, attempts to modify sleep deprivation and/or improve soldiers’ performance when sleep deprived is seen less as an option and more as an *obligation* or outright necessity given that lives are at stake and could be saved. The calculus as such, according to this report at least, runs as follows:

The maximum casualty rate depends strongly on the individuals sleep need  $\tau_0$ . Hence any efforts to improve human performance to minimize  $\tau_0$  for given tasks can lead to a significant decrease in the casualty rate of [about] 20 per cent. *Suppose a human could be engineered who slept for the same amount of time as a giraffe [1.9 hours per night]. This would lead to an approximate twofold decrease in the casualty rate. An adversary would need an approximate 40 per cent increase in troop levels to compensate for this advantage.* (MITRE 2008: 27, my emphasis)

This report is revealing on other counts too, not least its somewhat awkward or hedged handling of questions concerning the extent of sleep modification already under way in the (US) military to date. The use of 'supplements primarily to ameliorate sleep deprivation and improve physical performance', it is noted, 'is report[ed] to be common amongst US military personnel'. Yet this behaviour, it stresses, while recognised as something of a '*cultural norm* in the US', is '*not endorsed* by the US military' (2008: 33).

Officially endorsed or not, the military are certainly no strangers to the use of simple stimulants such as caffeine, or stronger stimulants such as amphetamines, to combat sleep deprivation and keep soldiers 'wide' if not 'wired' awake. Neuropharmaceuticals such as Modafinil and new generation cognitive enhancement agents currently in development such as ampakines (Lynch and Gall 2006; Lynch 2002), however, add a further important dimension to this pharmaceutical arsenal or arms race, alongside other military-sponsored research to unlock the biological or molecular secret, or secrets in the plural, of how to get by on less sleep.

The *Walter Reed Army Institute of Research* (WRAIR) in Silver Spring, Maryland, for example, has reputedly studied the effects of caffeine, amphetamines and Modafinil on troops kept awake for up to 85 hours (Sample 2004; WRAIR 1997). The French Foreign Legion are also reported to have taken Modafinil as early on as the Gulf War in 1991 (Sample 2004). Researchers at the University of Wisconsin, Madison, meanwhile, are trying to understand how certain animals, such as the migrating white-crowned sparrow, function perfectly well for prolonged periods of time on only a fraction of the sleep they are used to – an intriguing parallel being

drawn here between troops on covert or sustained combat missions and migrating birds (Ibid.).

All in all, some 86 proposed 'ergonomic and cognitive aids', according to the aforementioned US MITRE (2008) report, have been evaluated to date, including amphetamines and Modafinil, with ampakines now seen as the smart bet or target of choice. The idea here, as Greg Belenky from the WRAIR tellingly comments, is to '*turn sleep into an item of logistic supply...to treat it like fuel – how much do people have, how long will it last them, and when do we need to fill them up again*' (Belenky, quoted in Sample 2004). Sleep, in other words, to repeat, becomes a 'commodity of war', much like bombs, bullets and fuel (Sample 2004).

Whether or not of course these developments are another good example or prime expression of the cyborg status (cf. Gray 2000; Haraway 1990) of the modern-day or postmodern soldier is a debatable. To the extent, for example, that sleep in the military is now monitored, measured, managed, manipulated and modified in these ways through a whole array or arsenal of technoscientific paraphernalia – from wristwatches that carefully record and relay how much sleep soldiers get to forms of neuropharmaceutical enhancement and other current or near-future neurotechnologies such as brain stimulation, neural implants and associated technologies for enhanced night vision and the like (see, for example, Ben-Ari 2003) – then the answer may very well be a resounding or unqualified yes. To the extent, however, as Rose rightly reminds us, that many of these developments, in the military as elsewhere, concern *bio-* or *neurotechnological* interventions targeted at the vital normativities of life itself and its reshaped, reconfigured or re-engineered possibilities, then they surely render us '*all the more biological*' (2007: 20, original emphasis).

Literature too provides another rich site or source of speculation regarding the future or possible futures of sleep, including both sleep-filled and sleepless futures. H.G. Wells, for example, in *The Sleeper Awakes* (2005/1910), explores and exploits the dormant possibilities embodied and expressed in the case of Graham, who emerges from a 200-year-long sleep during which he has amazingly accumulated enough wealth to make him the owner of the world. At stake here, in other words, as Hancock and colleagues remark, is a novel in which sleep is fast 'becoming transformed into yet another adjunct of both relentless cycles of production and consumption, as well as the reproduction of evermore commercially dependent subjectivities' (2009: 87).

Other literary sources, in contrast, trade or play on various sleepless futures. Jonathan Coe's (1997) popular novel *The House of Sleep*, for instance, features the mad, maverick, half-crazed character Dr Gregory Duden, for whom sleep is considered or likened to a disease in need of a cure. Why despise sleep? Duden is asked, to which he curtly replies:

'I'll tell you why: because the sleeper is helpless; powerless. Sleep puts even the strongest people at the mercy of the weakest and most feeble...[a]...posture of *abject submission*...The brain disabled, the muscles inert and flaccid...the great leveller. Like fucking socialism'. (Coe 1997: 176–7, my emphasis)<sup>14</sup>

Novels within the science-fiction genre also of course conjure up various scenarios or nightmares regarding future 'sleepless' worlds. The critical issue in Ballard's (1992) short story 'Manhole 69', for example, concerns the plight of a group of surgically altered sleepless men, who slowly but surely find the world of permanent consciousness the worst

nightmare of all and eventually descend into a catatonic state of psychic zero as the 'walls', a metaphor presumably for consciousness, start to close in on these hapless victims and helpless souls.

Kress' (1996, 1995, 1993) *Beggars* trilogy, in contrast, is set in a near-future United States and the emergence of an ever-growing number of human beings who have been genetically engineered or modified to no longer require sleep – a new class of 'sleepless' and subsequently 'supersleepless', that is to say, who in an intriguing play or parody of values, are beautiful, disease-free, excellent, intelligent and industrious compared to sleeping bodies which are portrayed instead as destructive and 'entropic'. The *Beggars* trilogy in this respect, as Steinberg comments, provides a 'pointed allegory' not only of "sleepless" values as embodied, technological and political-economic aspirations, but as emergent from and a basis for a distinctive social order' (2008: 131). As one character tellingly remarks, early on in the first novel:

Sleep served an important evolutionary function...sleep was an aid to survival. But now it's a *left-over mechanism*, a vestige like an appendix. It switches on every night, but the need is gone. So we turn off the switch and its source, in the genes. (1993: 11, my emphasis)

At stake or on offer here then, glimpsed through these diverse and disparate sources, are a number of futures or possible futures in the making, so to speak. To the extent, moreover, that some of these developments are already with us, both on and off the military battlefield, courtesy of neuropsychopharmaceuticals and other drugs and devices on the horizon in a neuro-age or era, and to the extent that

science-fiction *reflects* as well as *anticipates* key trends and transformations in society, then it as much to do with futures present, or partly present perhaps, as futures yet to come. To the extent nonetheless that sleep continues to serve a valuable or vital social as well as biological role as 'time out', a 'tension-release' or a 'periodic remission' from the demands of the waking world (cf. Schwartz 1970; Parsons 1951), and to the extent that a 'good' sleep is a pleasure for many if not most of us, then the notion that sleep may one day become obsolete is unlikely: more a case perhaps of *customisation* or *optimisation* in the era of enhancement than *obsolescence*. On that 'reassuring' note, perhaps we may all rest easy.

## Conclusions

At stake here, it is clear, are a series of trends and transformations in sleep science and sleep medicine over the past half a century or so which, in countless ways, constitute another rich and indeed vital part of the politics or biopolitics of sleep today in the late modern age. This, for example, as we have seen, includes the *transformation* of sleep into an 'object' of scientific or technoscientific investigation in the sleep laboratory, the *translation* of sleep through the language or lexicon of 'disorders' into a medical matter diagnosed and treated in the sleep clinic, and more broadly the multiple ways in which sleep, in and through these processes, is part and parcel of the *biomedicalisation* and pharmaceuticalisation of life in the name of therapy or enhancement.

These processes nonetheless, I have argued, remain partial and incomplete to date. At the very least, we may say, they throw into critical relief once again the contested nature

and status of sleep today as a matter of concern or problem in the making, both inside and outside the sleep laboratory and the sleep clinic, and the multiple relays between science, medicine and the 'management' of sleep in everyday/night life. This moreover, as we have seen, includes newly forged or reconfigured relations between medico-managerial agendas or mandates, particularly those associated with sleep medicine, self-help and corporate governance and their intersections with prized neo-liberal values of 'enterprise' if not 'enhancement' in all walks of life.

The 'future' of sleep also appears, in a far from trivial or fanciful sense, to be with us already today, both on and off the military battlefield, given the potential now to not simply 'control' but to 'customise' or 'enhance' our bodies in various ways. A scenario in the case of sleep, I have argued, which on the one hand may seek to optimise the *quality* of our sleep, even if its *quantity* declines, and on the other hand may render sleep increasingly 'optional' if not 'obsolete'. Both options of course are ultimately strategies of 'enhancement' or 'optimisation' in effect, albeit with different aims and outcomes in mind.

This in turn highlights a further possible irony or paradox regarding the very role of biomedicalisation in the future of sleep. On the one hand, as we have seen, sleep science and sleep medicine will continue in all likelihood to champion and defend the power and promise of sleep. On the other hand, however, sleep science and sleep medicine also possess the power and potential, through the quest to unlock and unravel the mysteries of sleep and to design new interventions to optimise 'solutions' to sleep problems, to develop or devise ever new ways to downsize or do away with sleep in the (near) future, in part or in whole. Viewed in this latter light then, we might conclude, the 'biomedicalisation'

of sleep is itself somewhat Janus-faced, pointing simultaneously in two possible future directions which return us once again to the notion of sleep as a 'final frontier' of sorts. A frontier indeed which looks set to become ever more contested in the (near) future.

## Notes

1. See Kroker (2007), for example, for a recent authoritative biography or survey of the transformation of sleep research which I draw on extensively in the early parts of this chapter. Thanks too to Kenton Kroker for helpful conversations/communications on these and related issues over the past few years.
2. The broad, centuries-long, historical sweep of Kroker's (2007) (private to public, subjective to objective) sleep thesis, to be sure, leaves him potentially open to criticism here on various counts – see, for example, Smith's (2009) recent review of Kroker's book in *History of the Human Sciences*. To the extent nonetheless that my main aim or prime concern in this chapter is with trends and transformations in *sleep science and sleep medicine in the twentieth and early twenty-first centuries* it is not necessary to buy wholesale into this broader historical thesis, however productive or provocative it may be. See also previous chapters, particularly Chapter 4, of this book for further historical detail on both the public and private life of sleep and dreams prior to and beyond the modern-day sleep laboratory or sleep clinic.
3. Kleitman's *Sleep and Wakefulness*, moreover, first published in 1939, rapidly established itself as a key reference and authoritative text, covering pretty much everything published on sleep in the field of what subsequently was to become sleep science and sleep medicine.
4. A growing emphasis on the *brain*, as this suggests, is characteristic of these trends and transitions in sleep science over time. Hobson (1995), for example, tellingly captures and conveys this by rephrasing Abraham Lincoln's famous declaration about government. Sleep, Hobson states, is 'of the brain, by the brain and for the brain'. This, he hastens to add, is not to say that other parts of the body do not participate in or benefit from sleep. It is to emphasise nonetheless, he insists, 'that for sleep to occur a highly developed brain is necessary' (Ibid.: 3).
5. Polysomnography involves comprehensive biophysical recordings during sleep, including brain activity (EEG), eye movements (EOG),



muscle activation (EMG) and heart rhythms (ECG). The Multiple Sleep Latency Test (MSLT), in contrast, measures the time taken from the start of daytime naps to the onset of sleep, known as sleep latency, based on the assumption that the sleepier the person is and the heavier their 'sleep load' the shorter the period before sleep onset – with 0–5 minutes rated as 'severe' sleepiness and 15–20 minutes rated as 'excellent alertness' (see, for example, Carskadon and Dement 1977, and Dement 1999).

6. A 'European Insomnia Network' has recently been launched, given these ongoing problems, involving more than 100 researchers and clinicians from 23 countries with the aim to 'accelerate progress in our understanding of the neuroscience of this debilitating condition' and to promote the development of 'better models and pharmacological treatments for insomnia' (Van Somersen et al. 2009: 436). The Royal Society of Medicine, Sleep Medicine Section, also recently organised a day-long meeting in London on 'Insomnia: advances in aetiology and treatment' (17 February 2010), covering a range of topics such as the 'Neurobiology of arousal: relevance to insomnia' (Szabadi); 'Differential diagnosis of insomnia' (Idzikowski); 'Drug treatment of insomnia' (Nutt); 'CBT treatment of insomnia' (Flemming); 'Insomnia in depression' (Wilson); and the 'Influence of gender and socio-economic factors on sleep disturbance' (Arber) ([www.rsm.ac.uk/sleep](http://www.rsm.ac.uk/sleep)).
7. To the extent nonetheless that biomedicine still remains at the 'definitional centre' or 'core' of these processes (cf. Conrad 2007, 2005) in terms of the official certification or validation of any new bona fide 'disorder', then clearly these claims as to the constitutive or configurational power of popular culture in the making or shaping of a disorder cannot be pushed too far, without important qualifications at least.
8. It is for these very reasons indeed, despite Conrad's (2007) continuing preference for the more limited or specific notion of 'medicalisation', that I use the more extensive technoscientific term 'biomedicalisation' in the remainder of this chapter.
9. Chesire's (2008) own particular response to this question, however, is somewhat equivocal. 'Limited forms of pharmacological enhancement may be beneficial to the practice of medicine,' he notes. When 'pushed to the extreme', however, he continues, 'cognitive enhancement... is likely to be counterproductive. Undue emphasis on the instrumental aspect of medicine would potentially neglect other important aspects of medical professionalism such as striving for humility, compassion, altruism, interpersonal communication, and human wisdom that are always needed at the patient's bedside' (Ibid.: 598).

10. Pharmaceuticalisation in this sense denotes the transformation of human conditions or complaints, capacities or capabilities into opportunities for pharmaceutical intervention. It is, as such, a more specific term than biomedicalisation, which directs attention to the growing power and influence of the pharmaceutical industry in particular in these processes at both the macro (e.g. development, testing, regulation) and micro (e.g. doctor–patient, everyday life) levels of analysis. See, for example, Williams et al. (2011) for a comprehensive analytical framework for the various dimensions and dynamics of pharmaceuticalisation.
11. The emphasis on *may* here is worth explaining further, given that these are far from simple or straightforward matters or possibilities. Rose, for example, is careful to speak of the ‘layering’ of these more neurochemical or biosocial ways of knowing, understanding and acting on ourselves onto ‘other older senses of the self’ rather than their displacement or replacement (2007: 222). Yet resistance or rejection is also of course possible, not least when it comes to thinking of ourselves in neurobiological or neurochemical terms. To the extent moreover, as Rose himself notes, that ‘different practices and locales embody and enjoin different senses of the self’ (2007: 222), then this further underlines the complexities of any such processes of identification or *subjectification* and the need for more fine-grained context-specific empirical studies to tease out these problems and possibilities. See also Lock (2008) for a recent cautionary tale of the limits of ‘bio-sociality’ in relation to susceptibility genes for Alzheimer’s disease (AD), and other essays on ‘biosocialities’ in this edited volume by Gibbon and Novas (2008).
12. Some of the most staggering growth here in the US sleep aids market has occurred in the ‘sleep laboratories and annexed services’ group of products, with revenues of US \$2.2 billion in 2000 and a predicted growth of almost 160 per cent to US \$5.8 billion until 2012 (Alexander 2009). The product that most tellingly increased sales in this time period, however, was CPAP devices, with a predicted growth until 2012 of 650 per cent from US \$600,000 in 2000 to US \$4.1 billion (Alexander 2009) – see also Reichen (2009).
13. For a useful recent review of the sociology of the future as a newly emergent sub-field of inquiry, see, for example, Selin (2008). See also Brown and Michael (2003) on the constitutive role of expectations in the mobilisation of various technoscientific futures, including the ‘retrospecting of prospects’ and the ‘prospecting of retrospects’.
14. See also Winterton’s (2000) short essay, ‘Disappearance, I’, in which sleep, in dystopian fashion, becomes illegal.

## Afterword: In Search of Sleep ... Or ... The Politics of Sleep Revisited

To speak of sleep, let alone write about the politics of sleep, is a far from simple or straightforward matter, as the foregoing chapters attest. An amorphous, mutating phenomenon within a dynamic field of investments, sleep, as we have seen, is located at the intersection of material-corporeal questions concerning the regulation and governance of bodies and cultural questions concerning meaning and discourse. The site and source of multiple anxieties and aspirations, desires and dilemmas, hopes and fears, facts and fictions, fantasies and projections, which converge, conflict or coalesce in a multitude of forms or fashions. Sleep, as I have argued, doubles as both a *problem* or matter of concern in its own right and a *prism* or *point of articulation* if not *amplification* for a range of other concerns and anxieties, not least our increasingly vexed or troubled relationship to *time* (i.e. time compression, time paucity, time poverty or time scarcity) and the proliferation of doubts, risks and uncertainties associated with life and living in the late modern age.

Tracing or tracking sleep therefore involves its own challenges and complexities as to the very way, or perhaps more correctly the very ways, for they are multiple, sleep comes to be problematised and *politicised*. On the one hand, as we

have seen, the politicisation of sleep remains partial, problematic and incomplete if not inchoate and inconsequential. Something that is to say which defies explicit or full-blown politicisation, given that it stubbornly remains a blank or void in all our lives. Consciousness-raising or rallying about an absence or loss of consciousness in this respect, as previously noted, is more than simply a semantic conundrum. Even the biomedicalisation of sleep, on closer inspection, is a far from simple or straightforward process, with many complexities and contradictions. While we all indeed sleep well, poorly or somewhere in-between, the translation or transformation of this seemingly most 'personal' or 'private' of matters into a 'political' matter or matter of 'concern' continues to pose problems for those with any such ambitions in mind.

Yet sleep, as we have also seen, is *always already* indeed a political matter that by all accounts is becoming *ever more politicised* in recent times as a matter of 'concern' or a 'problem in the making' (cf. Wolf-Meyer 2008). From the bedroom to the boardroom, the laboratory to the sidewalk, the clinic to the courtroom, the classroom to the care home, the neighbourhood to the military barracks or battlefield, the prison to the formal corridors of political power, one may point to a variety of ways, places and spaces in which sleep has become or is fast becoming *politicised*.

As to the form or sort of politics at stake here, much of this, on closer inspection, turns out to be biopolitical in character. 'Vital' matters, that is to say, to do with the governance of sleep(iness/lessness), including the very ways in which sleep in all its multiplicity and mutability comes to be known, deciphered, documented, detailed, discussed, debated, disciplined, deployed and distributed in time and space. Like all other aspect of the body indeed, sleep

becomes something to monitor, to manage, to work at, to invest in or to improve upon – in the name of productivity, performance, vigilance, virtue, health, happiness, safety, wisdom and well-being or whatever – as active, accountable, responsible citizens and ‘enterprising selves’ in these neo-liberal or late modern times of ours (cf. Maasen and Sutter 2007; Rose 1996). When sleepiness, for example, becomes transformed into an ‘adverse’ or ‘at-risk’ soporific state and a morally culpable or blameworthy corporeal condition (cf. Kroll-Smith and Gunter 2005), when a seemingly ‘privatised’ act like napping becomes transformed into a ‘productive’ act and a regulated public time-space behaviour as a boost to productivity and performance both inside and outside the workplace (cf. Baxter and Kroll-Smith 2005), when medico-managerial agendas converge or coalesce around the governance of alert/sleepy or sleeping bodies and the quest for self-improvement (cf. Brown 2004), and when sleep itself becomes a vital ‘commodity’ or form of ‘capital’ to be colonised, cultivated, customised or converted into other forms of capital, then we may indeed speak of the biopolitics of sleep. In these and countless other ways, moreover, we glimpse once again the more or less continuous nature of contemporary forms of ‘control’ which quite literally get inside us or under the skin. Sleep, in other words, becomes another prime case or instance not simply of the (self-) governance of bodies but of the more or less subtle and pervasive (extra-institutional) workings of contemporary late capitalist ‘control’ societies (cf. Deleuze 1995).

As I write this Afterword, for example, a young man, about 18 or 21 years of age perhaps, has just come into the cafe to buy a coffee with his girlfriend wearing a T-shirt (manufactured by the ‘Obscene 18 Clothing’ company according to

the tag) which has emblazoned on it for all and sundry to see the following eye-catching statement: 'Damn right I'm good in bed: I can sleep for days'! Now clearly one shouldn't make too much of this. It does nonetheless, in part at least, illustrate perfectly not simply the playful relations between sleep and sex, or even the suggestion that sleep is the 'new' sex if not 'better' than sex, but the transformation of sleep – even when cast or construed if not championed in this case as an unproductive or non-productive act – into yet another opportunity for commercial or corporate capture or exploitation in words and deeds, which people wittingly or unwittingly, willingly or unwillingly, participate or 'buy into' in late capitalist 'control' societies in the name of 'freedom', 'flexibility' or just plain 'fun'.

Yet sleep of course, at one and the same time, is clearly not just another prime instance or example of the governance of bodies per se, but the governance of *(un)consciousness* in all its richness, complexities and contradictions. It is indeed in this very sense that I refer to sleep as an *absent presence* or *intimate other*, something which both *confirms* and *challenges*, *underwrites* and *undermines* our investments in the conscious waking world and the associated modernist dreams or desires of rational containment and control. Here we return then once again to the tensions, productive or problematic, between the *rationalisation, colonisation* or *control of sleep* on the one hand, and sleep as something that *befuddles, defies, exceeds* or *resists total rationalisation, colonisation* or *control* on the other hand. A potential site or source of corporeal protest or critique perhaps, or a powerful or potent reminder at least of our corporeal 'limits', themselves of course contested matters, in a rapidly escalating if not excessive, insatiable if not insane world which, to all intents and purposes, never stops.

Viewed in this light then, sleep may very well be regarded as a *final frontier* of sorts, if not *the* final frontier, in the history of humanity or corporeality. To the extent moreover that advances in bioscience, biomedicine and biotechnology, as a 'leading edge' of these developments, promise to further unravel the mysteries of sleep in the decades to come then this, potentially at least, opens up further opportunities not simply to defend or champion sleep through sleep-positive agendas in the 'wired awake' world, but to render it increasingly optional in the age or era of enhancement. A scenario, to be clear, where sleep will never doubtless be done away with altogether (i.e. rendered obsolete, redundant, a relic of the evolutionary past), given the pleasure, sanctuary or salvation it provides for many of us vital and valued 'time out', but where our powers to control and customisation sleep as lifestyle options or choices will in all likelihood grow courtesy of drugs and devices of kinds, some of which are already with us.

Struggles around sleep *rights* then, as this suggests, look set not simply to continue but to escalate or intensify in the near or not-too-distant future. This, moreover, if the foregoing enhancement or optimisation scenarios materialise or take off, will in all likelihood have to include a growing defence or respect for people's *rights not to sleep* on a temporary or even a (quasi-) permanent basis, or at the very least to reduce their sleep need well beyond what is currently deemed either advisable or possible. To the extent furthermore that this was done for good reason – in order, say, to be free of a sleep disorder, to minimise risks in safety-critical occupations, or to maximise time to do other socially or personally valued things in life for which people derived much pleasure or satisfaction – and to the extent that this

proved safe for both individuals and society alike, then on what possible grounds, it might be ventured, could we or should we object?

It is not my intention to arbitrate in these debates, or to take a normative stance in these matters, simply to note them as possible trends and tricky questions for the future regarding the sleep-society nexus and the politics or biopolitics of sleep. The proviso nonetheless that any such an 'option' proved safe and was indeed the product of 'free choice' rather than coercion of various kinds, is clearly important to bear in mind and ensure in any and all such future trends or transformations.

It also behoves us to ask, of course, in a more reflexive vein, what role the social sciences and humanities themselves play in these very discourses and debates regarding sleep and society, past, present and future. To the extent indeed that sleep is becoming ever more problematised or politicised in contemporary times, and to the extent that social scientists (myself and this book included), are part and parcel of these developments, discourses and debates, then we may justifiably refer to the co-construction or co-production of the very problems, prospects and possibilities we seek to study. This includes the rehearsal or projection of various possible futures, of the kind sketched in the book, concerning the 'well-slept' or the 'sleepless' society.

Herein then, to conclude, lies a further important dimension and dynamic to the politics of sleep and the role of the social sciences and humanities in these very agendas, positive or negative, critical or reflexive, if not radical. A problem very much 'in the making', to repeat, both inside and outside the academy, the sleep laboratory, the sleep clinic, the school, the workplace, the military camp or barracks,



including struggles over futures past, futures present, futures yet to come. In these and countless other ways, to restate the central message of this book one last time, sleep is not simply *political* through and through but increasingly *politicised* in the late modern age or era.

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